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Motor Protection Circuit Breakers

1



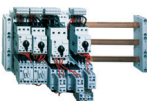
Contactors

2



Overloads

3



Mounting System

4



Relays & Timers

5



Circuit Breakers

6



Isolators & Switch Fuses

7



Pushbuttons & Control Switches

8



Signals & Sounders

9



Power Supplies

10



Programmable Logic Controllers

11



Operator Interface

12



Soft Starters

13



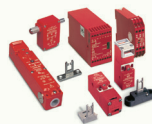
Drives

14



Terminals

15



Safety

16



Sensors

17

Index

i

1 • Motor Protection Circuit Breakers

Motor Protection Circuit Breakers

This range combines high switching capacity and versatility with robust, industrial design. When used with Allen-Bradley 100C contactors they can be combined to form Type 2 coordinated motor starters (up to 100kA) without over-sizing of the devices. A comprehensive range of accessories and wiring aids enable ultra-fast and fault free integration into any motor control system. From simple, stand-alone starters, to complex, coordinated systems, Allen-Bradley 140M MPCBs have the answer.

Features and benefits:

- Proven, durable design ensures continuity of supply and high operational performance
- Connection modules provide rapid, accurate and reliable assembly
- Broad range of accessories facilitates feedback of plant-floor information



Motor Protection Circuit Breakers

Manual Motor Starters



kW	Current	Switching Cap	Product Code	Price
0.02	0.1...0.16A	100kA	140A-C2A-A16	£34.20
0.06	0.16...0.25A	100kA	140A-C2A-A25	£34.20
0.09	0.25...0.4A	100kA	140A-C2A-A40	£34.20
0.18	0.4...0.63A	100kA	140A-C2A-A63	£34.20
0.25	0.63...1.0A	100kA	140A-C2A-B10	£34.70
0.55	1.0...1.6A	100kA	140A-C2A-B16	£36.00
0.75	1.6...2.5A	100kA	140A-C2A-B25	£38.20
1.5	2.5...4.0A	100kA	140A-C2A-B40	£38.20
2.2	4.0...6.3A	100kA	140A-C2A-B63	£38.20
4.0	6.3...10A	100kA	140A-C2A-C10	£42.40
7.5	10...16A	50kA	140A-C2A-C16	£43.50

Auxiliary Contacts



Contacts	Mounting	Product Code	Price
2NO	Left	140A-C-ASA20	£6.21
1NO-1NC	Left	140A-C-ASA11	£6.21

Compact Busbar



Description	Side Adder	Product Code	Price
2-way	-	140A-C-W452	£6.37
3-way	-	140A-C-W453	£7.73
4-way	-	140A-C-W454	£9.09
5-way	-	140A-C-W455	£10.00
2-way	Aux	140A-C-W542	£6.37
3-way	Aux	140A-C-W543	£7.73

Continued on next page

Description	Side Adder	Product Code	Price
4-way	Aux	140A-C-W544	£9.09
5-way	Aux	140A-C-W545	£10.00
Bus bar feeder terminal		140A-C-WT	£6.37
Blank space cover		140A-C-WS	£1.27

Motor Protection Circuit Breakers



kW	Current	Switching Cap	Mag Trip	Product Code	Price
0.02	0.1...0.16A	100kA	13 x le	140M-C2E-A16	£38.40
0.06	0.16...0.25A	100kA	13 x le	140M-C2E-A25	£38.60
0.09	0.25...0.4A	100kA	13 x le	140M-C2E-A40	£38.60
0.18	0.4...0.63A	100kA	13 x le	140M-C2E-A63	£39.40
0.25	0.63...1.0A	100kA	13 x le	140M-C2E-B10	£40.50
0.55	1.0...1.6A	100kA	13 x le	140M-C2E-B16	£43.00
0.75	1.6...2.5A	100kA	13 x le	140M-C2E-B25	£45.90
1.5	2.5...4.0A	100kA	13 x le	140M-C2E-B40	£45.90
2.2	4.0...6.3A	100kA	13 x le	140M-C2E-B63	£45.90
4	6.3...10A	100kA	13 x le	140M-C2E-C10	£50.80
7.5	10...16A	50kA	13 x le	140M-C2E-C16	£51.10
10	14.5...20A	15kA	13 x le	140M-C2E-C20	£55.10
11	18...25A	15kA	13 x le	140M-C2E-C25	£62.80
13	24...29	15kA	13 x le	140M-C2E-C29	£84.00
15	27...32	15kA	13 x le	140M-C2E-C32	£87.60
0.75	1.6...2.5A	100kA	13 x le	140M-D8E-B25	£57.90
1.5	2.5...4.0A	100kA	13 x le	140M-D8E-B40	£57.90
2.2	4.0...6.3A	100kA	13 x le	140M-D8E-B63	£57.90
4	6.3...10A	100kA	13 x le	140M-D8E-C10	£62.80
7.5	10...16A	100kA	13 x le	140M-D8E-C16	£62.90
10	14.5...20A	65kA	13 x le	140M-D8E-C20	£69.10
11	18...25A	65kA	13 x le	140M-D8E-C25	£81.20
13	24...29	50kA	13 x le	140M-D8E-C29	£92.60
15	27...32	50kA	13 x le	140M-D8E-C32	£98.40
4	6.3...10A	65kA	13 x le	140M-F8E-C10	£93.60
7.5	10...16A	65kA	13 x le	140M-F8E-C16	£93.60
10	14.5...20A	65kA	13 x le	140M-F8E-C20	£93.60
11	18...25A	65kA	13 x le	140M-F8E-C25	£107.00
15	23...32A	65kA	13 x le	140M-F8E-C32	£115.00
22	32...45A	65kA	13 x le	140M-F8E-C45	£148.00

Motor Protection Circuit Breakers

Large Motor Protection Circuit Breakers



kW	Current	Switching Cap	Mag Trip	Product Code	Price
30	24...60A	70kA	6...13 x ln	140MG-H8E-C60	£384.00
55	40...100A	70kA	6...13 x ln	140MG-H8E-D10	£384.00
75	60...150A	70kA	6...13 x ln	140MG-J8E-D15	£1,620.00

1 • Motor Protection Circuit Breakers

Motor Circuit Protectors (Magnetic Only)



kW	Current	Switching Cap	Mag Trip	Product Code	Price
0.02	0.16A	100kA	13 x le	140M-C2N-A16	£43.20
0.06	0.25A	100kA	13 x le	140M-C2N-A25	£43.20
0.09	0.4A	100kA	13 x le	140M-C2N-A40	£43.20
0.18	0.63A	100kA	13 x le	140M-C2N-A63	£43.00
0.25	1A	100kA	13 x le	140M-C2N-B10	£46.20
0.55	1.6A	100kA	13 x le	140M-C2N-B16	£46.20
0.75	2.5A	100kA	13 x le	140M-C2N-B25	£46.00
0.75	2.5A	100kA	13 x le	140M-D8N-B25	£49.10
1.5	4A	100kA	13 x le	140M-D8N-B40	£49.10
2.2	6.3A	100kA	13 x le	140M-D8N-B63	£49.10
4	10A	100kA	13 x le	140M-D8N-C10	£56.00
7.5	16A	100kA	13 x le	140M-D8N-C16	£56.10
11	25A	65kA	13 x le	140M-D8N-C25	£73.70
15	32A	50kA	13 x le	140M-D8N-C32	£92.00
11	25A	65kA	13 x le	140M-F8N-C25	£94.30
15	32A	65kA	13 x le	140M-F8N-C32	£111.00
22	45A	65kA	13 x le	140M-F8N-C45	£144.00

Transformer Protection Breakers - 140M



Current	Mag Trip	Product Code	Price
0.16A	16...20 x le	140M-C2T-A16	£50.50
0.25A	16...20 x le	140M-C2T-A25	£50.50
0.4A	16...20 x le	140M-C2T-A40	£50.50
0.63A	16...20 x le	140M-C2T-A63	£50.70
1A	16...20 x le	140M-C2T-B10	£50.60
1.6A	16...20 x le	140M-C2T-B16	£50.60
2.5A	16...20 x le	140M-C2T-B25	£50.40
4A	16...20 x le	140M-C2T-B40	£50.40
6.3A	16...20 x le	140M-C2T-B63	£50.40
10A	16...20 x le	140M-C2T-C10	£56.00
16A	16...20 x le	140M-C2T-C16	£55.70
20A	16...20 x le	140M-D8T-C20	£68.20
25A	16...20 x le	140M-F8T-C25	£115.00
32A	16...20 x le	140M-F8T-C32	£141.00

Auxiliary Contacts - 140M



Contacts	Mounting	Max. per Breaker	Product Code	Price
2NO	Right	2	140M-C-ASA20	£7.18
2NC	Right	2	140M-C-ASA02	£7.18
1NO-1NC	Right	2	140M-C-ASA11	£7.18

Continued on next page

Contact	Mounting	Max. per Breaker	Product Code	Price
1NO	Front	1	140M-C-AFA10	£4.80
1NC	Front	1	140M-C-AFA01	£4.80
2NO	Front	1	140M-C-AFA20	£5.92
1NO-1NC	Front	1	140M-C-AFA11	£5.92

Trip Indicating Contacts - 140M



Contacts	Mounting	Product Code	Price
2NO	Right	140M-C-ASAR10M10	£14.00
1NO-1NC	Right	140M-C-ASAR10M01	£14.00
1NO-1NC	Right	140M-C-ASAR01M10	£14.00
1NO-1NC	Right	140M-C-ASAM11	£11.20
2NO	Front	140M-C-AFAR10A10	£9.35
1NO-1NC	Front	140M-C-AFAR10A01	£9.35

Lock-off Rotary Knob - 140M



For Use With	Colour	Product Code	Price
140MC/D/F	Black	140M-C-KN1	£1.69
140MC/D/F	Red/Yellow	140M-C-KRY1	£1.69

Door Interlocking Handle



Description	For Use With	Colour	Product Code	Price
Operating handle	140MC/D/F	Black	140M-C-DN66	£27.60
Operating handle	140MC/D/F	Red/Yellow	140M-C-DRY66	£27.80
Extension shaft	140MC/D/F		140M-C-DS	£11.20
Legend plate 'Main Switch'		Black/Grey	140M-C-DFCN	£2.60
Legend plate 'Emergency Off'		Black/Yellow	140M-C-DFCRY	£2.60
Locking tag			140M-C-M3	£7.14
Operating handle kit (12")	140MG-H/J	Black	140G-H-RVM12B	£62.20
Operating handle kit (21")	140MG-H/J	Black	140G-H-RVM21B	£66.20

Connecting Module



Type	For Use With	Product Code	Price
Eco	140MC-100K	140M-C-PEK12	£3.66
Eco	140MC-100C09...C23	140M-C-PEC23	£4.32
Eco	140MD-100C09...C23	140M-D-PEC23	£4.32
Standard	140MC-100C09...C23	140M-C-PNC23	£6.56
Standard	140MD-100C30...C37	140M-D-PNC37	£6.56
Standard	140MF-100C30...C37	140M-F-PNC37	£6.02
Standard	140MF-100C43	140M-F-PNC43	£6.96

1 • Motor Protection Circuit Breakers

Compact Busbar



Description	For Use With	Product Code	Price
2-way		140M-C-W452N	£6.43
3-way		140M-C-W453N	£7.65
4-way		140M-C-W454N	£8.72
5-way		140M-C-W455N	£9.66
2-way	Aux	140M-C-W542N	£6.96
3-way	Aux	140M-C-W543N	£7.95
4-way	Aux	140M-C-W544N	£9.00
5-way	Aux	140M-C-W545N	£10.20

Terminal Cover



Description	Product Code	Price
IP2X cover for unused busbar	140M-C-WSN	£1.64

Feeder Terminal



Description	Product Code	Price
Busbar feeder terminal	140M-C-WTEN	£7.18

DIN Rail Plinth



Description	For Use With	Product Code	Price
DIN rail mtg plinth	140MC = 140MD depth	140-KBH2	£1.74

Terminal Extensions



Description	For Use With	Product Code	Price
Coil terminal extensions	140MC/D - 100C09...23	140M-C-PSC23	£6.57
Coil terminal extensions	140MD/F - 100C30...43	140M-F-PSC43	£7.34

Terminal Shields



For Use With	IP Rating	Poles	Length	Product Code	Price
140MG-H	IP40	3	2mm	140G-H-TC3L	£23.90
140MG-H	IP40	3	50mm	140G-H-TC3H	£28.60
140MG-J	IP40	3	2mm	140G-J-TC3L	£30.00
140MG-J	IP40	3	60mm	140G-J-TC3H	£36.20

Terminal Lugs



For Use With	Pack Of	Cable	Product Code	Price
140MG-H	3	2.5...95mm	140G-H-TLC13	£13.90
140MG-J	3	6...185mm	140G-J-TLC13	£15.20

Contactors

The workhorses of the controls industry, Allen-Bradley contactors have demonstrated their extreme reliability in countless, critical applications, world-wide. This is a complete range covering all load requirements which, when coupled with the large selection of accessories, can be matched to any application. Four-pole and opposed-pole options are also available.

Features and benefits:

- Optimised power-to-size ratio saves panel space
- World-wide approvals ensure customer acceptability and compliance
- Bifurcated auxiliary contacts ensure high control-circuit integrity



3-pole Miniature Contactors



kW	AC-3 Current	AC-1 Current	Aux	Coil	Product Code	Price
2.2	5A	20A	1NO	24V AC	100-K05KJ10	£17.10
2.2	5A	20A	1NC	24V AC	100-K05KJ01	£17.10
4	9A	20A	1NO	24V AC	100-K09KJ10	£19.00
4	9A	20A	1NC	24V AC	100-K09KJ01	£19.00
5.5	12A	20A	1NO	24V AC	100-K12KJ10	£21.00
5.5	12A	20A	1NC	24V AC	100-K12KJ01	£21.00
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2.2	5A	20A	1NO	110V AC	100-K05D10	£17.10
2.2	5A	20A	1NC	110V AC	100-K05D01	£17.10
4	9A	20A	1NO	110V AC	100-K09D10	£19.00
4	9A	20A	1NC	110V AC	100-K09D01	£19.00
5.5	12A	20A	1NO	110V AC	100-K12D10	£21.00
5.5	12A	20A	1NC	110V AC	100-K12D01	£21.00
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2.2	5A	20A	1NO	230V AC	100-K05KF10	£17.10
2.2	5A	20A	1NC	230V AC	100-K05KF01	£17.10
4	9A	20A	1NO	230V AC	100-K09KF10	£19.00
4	9A	20A	1NC	230V AC	100-K09KF01	£19.00
5.5	12A	20A	1NO	230V AC	100-K12KF10	£21.00
5.5	12A	20A	1NC	230V AC	100-K12KF01	£21.00
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2.2	5A	20A	1NO	400V AC	100-K05KN10	£17.10
2.2	5A	20A	1NC	400V AC	100-K05KN01	£17.10
4	9A	20A	1NO	400V AC	100-K09KN10	£19.00
4	9A	20A	1NC	400V AC	100-K09KN01	£19.00
5.5	12A	20A	1NO	400V AC	100-K12KN10	£21.00
5.5	12A	20A	1NC	400V AC	100-K12KN01	£21.00
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2.2	5A	20A	1NO	24V DC	100-K05DJ10	£22.50
2.2	5A	20A	1NC	24V DC	100-K05DJ01	£22.50
4	9A	20A	1NO	24V DC	100-K09DJ10	£25.10
4	9A	20A	1NC	24V DC	100-K09DJ01	£25.10
5.5	12A	20A	1NO	24V DC	100-K12DJ10	£26.80
5.5	12A	20A	1NC	24V DC	100-K12DJ01	£26.80

Miniature Contactors

2 · Contactors

4-pole Miniature Contactors



kW	AC-3 Current	AC-1 Current	Aux	Coil	Product Code	Price
2.2	5A	20A	-	24V AC	100-K05KJ400	£17.90
4	9A	20A	-	24V AC	100-K09KJ400	£19.90
5.5	12A	20A	-	24V AC	100-K12KJ400	£21.70
2.2	5A	20A	-	110V AC	100-K05D400	£17.90
4	9A	20A	-	110V AC	100-K09D400	£19.90
5.5	12A	20A	-	110V AC	100-K12D400	£21.70
2.2	5A	20A	-	230V AC	100-K05KF400	£17.90
4	9A	20A	-	230V AC	100-K09KF400	£19.90
5.5	12A	20A	-	230V AC	100-K12KF400	£21.70
2.2	5A	20A	-	400V AC	100-K05KN400	£17.90
4	9A	20A	-	400V AC	100-K09KN400	£19.90
5.5	12A	20A	-	400V AC	100-K12KN400	£21.70
2.2	5A	20A	-	24V DC	100-K05DJ400	£23.10
4	9A	20A	-	24V DC	100-K09DJ400	£25.20
5.5	12A	20A	-	24V DC	100-K12DJ400	£27.60

Miniature Contactors

Auxiliary Contacts



Contacts	Product Code	Price
2NO	100-KFC20	£5.28
2NC	100-KFC02	£5.28
1NO-1NC	100-KFC11	£5.28
4NO	100-KFC40	£9.73
3NO-1NC	100-KFC31	£9.73
2NO-2NC	100-KFC22	£9.73

Surge Suppressors



Type	Voltage	Product Code	Price
RC	24...48V AC	100-KFSC50	£8.91
RC	110...280V AC	100-KFSC280	£8.91
RC	380...480V AC	100-KFSC480	£8.91
Varistor	12...55V AC/DC	100-KFSV55	£9.44
Varistor	56...136V AC/DC	100-KFSV136	£9.44
Varistor	137...277V AC/DC	100-KFSV277	£9.44
Diode	12...250V DC	100-KFSD250	£5.25

Mechanical Interlock



Description	Product Code	Price
Mechanical interlock	100-KMCH	£4.25

ECO Connecting Module



Description	Product Code	Price
ECO connecting module - 140MC to 100K	140M-C-PEK12	£3.66

Power Wiring Kit



Description	Product Code	Price
Reversing and Y/D connection	100-KPR	£6.74

Contactors



KW	AC-3 Current	AC-1 Current	Aux	Coil	Product Code	Price
4	9A	32A	1NO	24V AC	100-C09KJ10	£23.80
4	9A	32A	1NC	24V AC	100-C09KJ01	£23.80
5.5	12A	32A	1NO	24V AC	100-C12KJ10	£27.90
5.5	12A	32A	1NC	24V AC	100-C12KJ01	£27.90
7.5	16A	32A	1NO	24V AC	100-C16KJ10	£35.10
7.5	16A	32A	1NC	24V AC	100-C16KJ01	£35.10
11	23A	32A	1NO	24V AC	100-C23KJ10	£49.20
11	23A	32A	1NC	24V AC	100-C23KJ01	£49.20
15	37A	65A	-	24V AC	100-C30KJ00	£74.20
18.5	37A	65A	-	24V AC	100-C37KJ00	£88.70
22	43A	85A	-	24V AC	100-C43KJ00	£107.00
25	55A	85A	-	24V AC	100-C55KJ00	£127.00
32	60A	100A	-	24V AC	100-C60KJ00	£142.00
40	72A	100A	-	24V AC	100-C72KJ00	£172.00
45	85A	100A	-	24V AC	100-C85KJ00	£221.00
55	97A	130A	-	24V AC	100-C97KJ00	£239.00
4	9A	32A	1NO	110V AC	100-C09KD10	£23.80
4	9A	32A	1NC	110V AC	100-C09KD01	£23.80
5.5	12A	32A	1NO	110V AC	100-C12KD10	£27.90
5.5	12A	32A	1NC	110V AC	100-C12KD01	£27.90
7.5	16A	32A	1NO	110V AC	100-C16KD10	£35.10
7.5	16A	32A	1NC	110V AC	100-C16KD01	£35.10
11	23A	32A	1NO	110V AC	100-C23KD10	£49.20
11	23A	32A	1NC	110V AC	100-C23KD01	£49.20
15	30A	65A	-	110V AC	100-C30KD00	£74.20
18.5	37A	65A	-	110V AC	100-C37KD00	£88.70
22	43A	85A	-	110V AC	100-C43KD00	£107.00
25	55A	85A	-	110V AC	100-C55KD00	£127.00
32	60A	100A	-	110V AC	100-C60KD00	£142.00
40	72A	100A	-	110V AC	100-C72KD00	£172.00
45	85A	100A	-	110V AC	100-C85KD00	£221.00
55	97A	130A	-	110V AC	100-C97KD00	£239.00
4	9A	32A	1NO	230V AC	100-C09KF10	£23.80
4	9A	32A	1NC	230V AC	100-C09KF01	£23.80

Miniature Contactors • Contactors

Continued on next page

2 • Contactors



Contactors

kW	AC-3 Current	AC-1 Current	Aux	Coil	Product Code	Price
5.5	12A	32A	1NO	230V AC	100-C12KF10	£27.90
5.5	12A	32A	1NC	230V AC	100-C12KF01	£27.90
7.5	16A	32A	1NO	230V AC	100-C16KF10	£35.10
7.5	16A	32A	1NC	230V AC	100-C16KF01	£35.10
11	23A	32A	1NO	230V AC	100-C23KF10	£49.20
11	23A	32A	1NC	230V AC	100-C23KF01	£49.20
15	30A	65A	-	230V AC	100-C30KF00	£74.20
18.5	37A	65A	-	230V AC	100-C37KF00	£88.70
22	43A	85A	-	230V AC	100-C43KF00	£107.00
25	55A	85A	-	230V AC	100-C55KF00	£127.00
32	60A	100A	-	230V AC	100-C60KF00	£142.00
40	72A	100A	-	230V AC	100-C72KF00	£172.00
45	85A	100A	-	230V AC	100-C85KF00	£221.00
55	97A	130A	-	230V AC	100-C97KF00	£239.00
4	9A	32A	1NO	400V AC	100-C09KN10	£23.80
4	9A	32A	1NC	400V AC	100-C09KN01	£23.80
5.5	12A	32A	1NO	400V AC	100-C12KN10	£27.90
5.5	12A	32A	1NC	400V AC	100-C12KN01	£27.30
7.5	16A	32A	1NO	400V AC	100-C16KN10	£35.10
7.5	16A	32A	1NC	400V AC	100-C16KN01	£35.10
11	23A	32A	1NO	400V AC	100-C23KN10	£49.20
11	23A	32A	1NC	400V AC	100-C23KN01	£48.00
15	30A	65A	-	400V AC	100-C30KN00	£74.20
18.5	37A	65A	-	400V AC	100-C37KN00	£88.70
22	43A	85A	-	400V AC	100-C43KN00	£107.00
25	55A	85A	-	400V AC	100-C55KN00	£127.00
32	60A	100A	-	400V AC	100-C60KN00	£142.00
40	72A	100A	-	400V AC	100-C72KN00	£172.00
45	85A	100A	-	400V AC	100-C85KN00	£221.00
55	97A	130A	-	400V AC	100-C97KN00	£233.00
4	9A	32A	1NO	24V DC	100-C09EJ10	£41.90
4	9A	32A	1NC	24V DC	100-C09EJ01	£41.90
5.5	12A	32A	1NO	24V DC	100-C12EJ10	£44.70
5.5	12A	32A	1NC	24V DC	100-C12EJ01	£44.70
7.5	16A	32A	1NO	24V DC	100-C16EJ10	£54.70
7.5	16A	32A	1NC	24V DC	100-C16EJ01	£54.70
11	23A	32A	1NO	24V DC	100-C23EJ10	£67.60
11	23A	32A	1NC	24V DC	100-C23EJ01	£67.60
15	30A	65A	-	24V DC	100-C30EJ00	£80.80
18.5	37A	65A	-	24V DC	100-C37EJ00	£95.60
22	43A	85A	-	24V DC	100-C43EJ00	£133.00
25	55A	85A	-	24VDC	100-C55EJ00	£147.00
32	60A	100A	-	24V DC	100-C60DJ00	£173.00
40	72A	100A	-	24V DC	100-C72DJ00	£197.00
45	85A	100A	-	24V DC	100-C85DJ00	£228.00
55	97A	130A	-	24V DC	100-C97DJ00	£240.00

Safety Contactors - 100S-C



kW	AC-3 Current	AC-1 Current	Aux	Coil	Product Code	Price
4	9A	32A	2NO-3NC	110V AC	100S-C09KD23C	£40.30
5.5	12A	32A	2NO-3NC	110V AC	100S-C12KD23C	£45.40
7.5	16A	32A	2NO-3NC	110V AC	199S-C16KD23C	£51.50
11	23A	32A	2NO-3NC	110V AC	100S-C23KD23C	£65.60
15	30A	65A	2NO-2NC	110V AC	100S-C30KD22C	£93.80
18.5	37A	65A	2NO-2NC	110V AC	100S-C37KD22C	£108.00
22	43A	85A	2NO-2NC	110V AC	100S-C43KD22C	£125.00
32	60A	100A	2NO-2NC	110V AC	100S-C60KD22C	£161.00
40	72A	100A	2NO-2NC	110V AC	100S-C72K22C	£191.00
45	85A	100A	2NO-2NC	110V AC	100S-C85KD22C	£239.00
55	97A	130A	2NO-2NC	110V AC	100S-C97KD22C	£257.00
4	9A	32A	2NO-3NC	240V AC	100S-C09KF23C	£40.30
5.5	12A	32A	2NO-3NC	240V AC	100S-C12KF23C	£45.00
7.5	16A	32A	2NO-3NC	240V AC	100S-C16KF23C	£51.50
11	23A	32A	2NO-3NC	240V AC	100S-C23KF23C	£65.60
15	30A	65A	2NO-2NC	240V AC	100S-C30KF22C	£93.80
18.5	37A	65A	2NO-2NC	240V AC	100S-C37KF22C	£108.00
22	43A	85A	2NO-2NC	240V AC	100S-C43KF22C	£124.00
32	60A	100A	2NO-2NC	240V AC	100S-C60KF22C	£161.00
40	72A	100A	2NO-2NC	240V AC	100S-C72KF22C	£191.00
45	85A	100A	2NO-2NC	240V AC	100S-C85KF22C	£241.00
55	97A	130A	2NO-2NC	240V AC	100S-C97KF22C	£257.00
4	9A	32A	2NO-3NC	24V DC	100S-C09EJ23C	£58.20
5.5	12A	32A	2NO-3NC	24V DC	100S-C12EJ23C	£61.60
7.5	16A	32A	2NO-3NC	24V DC	100S-C16EJ23C	£66.70
15	30A	65A	2NO-2NC	24V DC	100S-C30EJ22C	£96.70
32	60A	100A	2NO-2NC	24V DC	100S-C60DJ22C	£189.00
40	72A	100A	2NO-2NC	24V DC	100S-C72DJ22C	£214.00
45	85A	100A	2NO-2NC	24V DC	100S-C85DJ22C	£244.00
55	97A	130A	2NO-2NC	24V DC	100S-C97DJ22C	£256.00

Contactors

Auxiliary Contacts - Front Mounting



Contacts	Product Code	Price
2NC	100-FA02	£6.10
1NO-1NC	100-FA11	£6.10
2NO	100-FA20	£6.10
2NO-2NC	100-FA22	£11.10
3NO-1NC	100-FA31	£11.10
4NO	100-FA40	£11.40
2NO (1EM)-2NC (1LB)	100-FAL22	£12.60

Auxiliary Contacts - Side Mounting



Contacts	Product Code	Price
1NC	100-SB01	£6.98
1NO	100-SB10	£6.98
2NC	100-SB02	£8.17
1NO-1NC	100-SB11	£8.17
2NO	100-SB20	£8.17
1NC (EM)-1NC (LB)	100-SBL11	£9.49

Timers



Voltage	Function	Type	Range	Product Code	Price
AC	On-delay	Pneumatic	0.3...30 secs	100-FPTA30	£47.00
AC	On-delay	Pneumatic	1.8...180 secs	100-FPTA180	£47.00
AC	Off-delay	Pneumatic	0.3...30 secs	100-FPTB30	£49.60
AC	Off-delay	Pneumatic	1.8...180 secs	100-FPTB180	£49.60
110...240V	On-delay	Electronic	1...30 secs	100-ETA30	£37.30
110...240V	On-delay	Electronic	10...180 secs	100-ETA180	£40.50
110...240V	Y/D	Electronic	1...30 secs	100-ETY30	£51.40

Mechanical Interlock



Description	Product Code	Price
Mechanical interlock	100-MCA00	£9.96
Mechanical interlock with 2NC auxiliaries	100-MCA02	£14.10

Latch Attachments



Voltage	Contacts	Product Code	Price
24V 50/60Hz	1NO-1NC	100-FL11KJ	£39.40
110V 50/60Hz	1NO-1NC	100-FL11KD	£39.40
230V 50/60Hz	1NO-1NC	100-FL11KF	£39.40
400V 50/60Hz	1NO-1NC	100-FL11KN	£39.40

DC Interface Modules



Voltage	Coil	Product Code	Price
18...30V DC	110...240V AC	100-JE	£31.90

Surge Suppressors



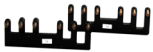
Type	Voltage	Product Code	Price
RC	24...48V AC	100-FSC48	£9.33
RC	110...280V AC	100-FSC280	£9.33
RC	380...480V AC	100-FSC480	£9.33
Varistor	12...55V AC/DC	100-FSV55	£8.21
Varistor	56...136V AC/DC	100-FSV136	£8.70
Varistor	137...277V AC/DC	100-FSV277	£8.70
Diode	12...250V DC	100-FSD250	£7.60

Connection Pieces



Type	Gap	Side Aux	Product Code	Price
Single	0mm	No	100-S0	£0.42
Dual	9mm	Yes	100-S9	£0.71

Power Wiring Kit - Reversing



Description	For Use With	Product Code	Price
Reversing connection	100C09...C23	105-PW23	£12.40
Reversing connection	100C30...C37	105-PW37	£13.80
Reversing connection	100C43...C55	105-PW55	£19.10
Reversing connection	100C60...C97	105-PW85	£33.80

Power Wiring Kit - Star/Delta



Description	Main/Delta Contactor	Star Contactor	Product Code	Price
Y/D connection	100C09...C23	100C09...C23	170-PW23	£15.60
Y/D connection	100C30...C37	100C09...C23	170-PW37	£17.70
Y/D connection	100C43...C55	100C30	170-PW55	£18.40
Y/D connection	100C60...C72	100C37...C55	170-PW72	£36.70
Y/D connection	100C85...C97	100C60...C72	170-PW85	£38.70

Overloads

Designed to match perfectly with the 100 series contactors, this range of overload relays offers the choice of conventional, thermal or electronic current monitoring. The electronic devices offer superior protection with network options and selectable trip classes. By selecting a single E1Plus electronic overload it is possible to offer over-current protection to motors from 4kW...11kW, with a range of trip classes, on just one device.



Features and benefits:

- Enhanced motor protection helps reduce critical failures
- Network options allow information transfer into your Integrated Architecture
- Minimal heat dissipation permits reduced panel sizes

Thermal Overload Relays - 193K



Overload Range	Reset	Trip Class	Trip Contacts	For Use With	Product Code	Price
0.1...0.16A	Man/Auto	10	1NO-1NC	100K05...K12	193-KA16	£21.00
0.16...0.25A	Man/Auto	10	1NO-1NC	100K05...K12	193-KA25	£21.00
0.25...0.40A	Man/Auto	10	1NO-1NC	100K05...K12	193-KA40	£21.00
0.35...0.50A	Man/Auto	10	1NO-1NC	100K05...K12	193-KA50	£21.00
0.45...0.63A	Man/Auto	10	1NO-1NC	100K05...K12	193-KA63	£21.00
0.55...0.80A	Man/Auto	10	1NO-1NC	100K05...K12	193-KA80	£21.00
0.75...1.0A	Man/Auto	10	1NO-1NC	100K05...K12	193-KB10	£21.00
0.90...1.3A	Man/Auto	10	1NO-1NC	100K05...K12	193-KB13	£21.00
1.1...1.6A	Man/Auto	10	1NO-1NC	100K05...K12	193-KB16	£21.00
1.4...2.0A	Man/Auto	10	1NO-1NC	100K05...K12	193-KB20	£21.00
1.8...2.5A	Man/Auto	10	1NO-1NC	100K05...K12	193-KB25	£21.00
2.3...3.2A	Man/Auto	10	1NO-1NC	100K05...K12	193-KB32	£21.00
2.9...4.0A	Man/Auto	10	1NO-1NC	100K05...K12	193-KB40	£21.00
3.5...4.8A	Man/Auto	10	1NO-1NC	100K05...K12	193-KB48	£21.00
4.5...6.3A	Man/Auto	10	1NO-1NC	100K05...K12	193-KB63	£21.00
5.5...7.5A	Man/Auto	10	1NO-1NC	100K09...K12	193-KB75	£21.00
7.2...10.0A	Man/Auto	10	1NO-1NC	100K09...K12	193-KC10	£21.80
9.0...12.5A	Man/Auto	10	1NO-1NC	100K12	193-KC12	£21.80

Thermal Overload Relays - 193T1



Overload Range	Reset	Trip Class	Trip Contacts	For Use With	Product Code	Price
0.16...0.24A	Man/Auto	10	1NO-1NC	100C09...C23	193-T1AA25	£27.50
0.25...0.4A	Man/Auto	10	1NO-1NC	100C09...C23	193-T1AA40	£27.50
0.35...0.5A	Man/Auto	10	1NO-1NC	100C09...C23	193-T1AA50	£27.50
0.45...0.63A	Man/Auto	10	1NO-1NC	100C09...C23	193-T1AA63	£27.50
0.55...0.3A	Man/Auto	10	1NO-1NC	100C09...C23	193-T1AA80	£27.50
0.75...1A	Man/Auto	10	1NO-1NC	100C09...C23	193-T1AB10	£27.50
0.9...1.3A	Man/Auto	10	1NO-1NC	100C09...C23	193-T1AB13	£27.50
1.1...1.6A	Man/Auto	10	1NO-1NC	100C09...C23	193-T1AB16	£27.50
1.4...2A	Man/Auto	10	1NO-1NC	100C09...C23	193-T1AB20	£27.50
1.8...2.5A	Man/Auto	10	1NO-1NC	100C09...C23	193-T1AB25	£27.50
2.3...3.2A	Man/Auto	10	1NO-1NC	100C09...C23	193-T1AB32	£27.50

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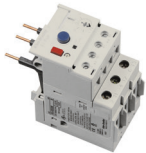
Overload Range	Reset	Trip Class	Trip Contacts	For Use With	Product Code	Price
2.9...4A	Man/Auto	10	1NO-1NC	100C09...C23	193-T1AB40	£27.50
3.0...4.5A	Man/Auto	10	1NO-1NC	100C09...C23	193-T1AB48	£27.50
4.5...6.3A	Man/Auto	10	1NO-1NC	100C09...C23	193-T1AB63	£27.50
5.5...7.5A	Man/Auto	10	1NO-1NC	100C09...C23	193-T1AB75	£27.50
7.2...10.0A	Man/Auto	10	1NO-1NC	100C09...C23	193-T1AC10	£27.50
9.0...12.5A	Man/Auto	10	1NO-1NC	100C09...C23	193-T1AC12	£27.50
11.3...16A	Man/Auto	10	1NO-1NC	100C12...C23	193-T1AC16	£27.50
15...20A	Man/Auto	10	1NO-1NC	100C16...C23	193-T1AC20	£27.50
17.5...21.5A	Man/Auto	10	1NO-1NC	100C16...C23	193-T1AC21	£27.50
21...25A	Man/Auto	10	1NO-1NC	100C23	193-T1AC25	£27.50
24.5...30A	Man/Auto	10	1NO-1NC	100C30...C37	193-T1BC30	£37.10
29...36A	Man/Auto	10	1NO-1NC	100C30...C37	193-T1BC36	£37.10
33...38A	Man/Auto	10	1NO-1NC	100C37	193-T1BC38	£37.10
35...47A	Man/Auto	10	1NO-1NC	100C43...55	193-T1CC47	£51.30
45...60A	Man/Auto	10	1NO-1NC	100C60...C85	193-T1DC60	£62.80
58...75A	Man/Auto	10	1NO-1NC	100C72...C85	193-T1DC75	£62.80
72...90A	Man/Auto	10	1NO-1NC	Standalone	193-T1DC90	£59.00

Electronic Overload Relays - 193ED - E1



Overload Range	Reset	Trip Class	Trip Contacts	For Use With	Product Code	Price
0.1...0.5A	Manual	10	1NO-1NC	100C09...C23	193-ED1AB	£28.50
0.2...1A	Manual	10	1NO-1NC	100C09...C23	193-ED1BB	£28.50
1...5A	Manual	10	1NO-1NC	100C09...C23	193-ED1CB	£28.50
3.2...16A	Manual	10	1NO-1NC	100C09...C23	193-ED1DB	£28.50
5.4...27A	Manual	10	1NO-1NC	100C09...C23	193-ED1EB	£28.50
5.4...27A	Manual	10	1NO-1NC	100C30...C43	193-ED1ED	£43.60
9...45A	Manual	10	1NO-1NC	100C30...C43	193-ED1FD	£43.60

Electronic Overload Relays - 193EE - E1 Plus



Overload Range	Reset	Trip Class	Trip Contacts	For Use With	Product Code	Price
0.1...0.5A	Man/Auto	10/15/20/30	1NO-1NC	100C09...C23	193-EEAB	£35.80
0.2...1A	Man/Auto	10/15/20/30	1NO-1NC	100C09...C23	193-EEBB	£35.80
1...5A	Man/Auto	10/15/20/30	1NO-1NC	100C09...C23	193-EECB	£35.80
3.2...16A	Man/Auto	10/15/20/30	1NO-1NC	100C09...C23	193-EEDB	£35.80
5.4...27A	Man/Auto	10/15/20/30	1NO-1NC	100C09...C23	193-EEEB	£41.60
5.4...27A	Man/Auto	10/15/20/30	1NO-1NC	100C30...C43	193-EEED	£66.20
5.4...27A	Man/Auto	10/15/20/30	1NO-1NC	100C60...C97	193-EEEE	£88.00
11...55A	Man/Auto	10/15/20/30	1NO-1NC	100C30...C55	193-EEQD	£65.40
9...45A	Man/Auto	10/15/20/30	1NO-1NC	100C30...C55	193-EEFD	£66.20
9...45A	Man/Auto	10/15/20/30	1NO-1NC	100C60...C97	193-EEFE	£88.00
18...90A	Man/Auto	10/15/20/30	1NO-1NC	100C60...C97	193-EEGE	£88.00
60...120A	Man/Auto	10/15/20/30	1NO 1NC	100C60...C97	193-EEVE	£60.90
30...150A	Man/Auto	10/15/20/30	1NO-1NC	100D115...D180	193-EEHF	£280.00
40...200A	Man/Auto	10/15/20/30	1NO-1NC	100D115...D180	193-EEJF	£280.00
40...200A	Man/Auto	10/15/20/30	1NO-1NC	100D210...D420	193-EEJG	£407.00
60...300A	Man/Auto	10/15/20/30	1NO-1NC	100D210...D420	193-EEKG	£407.00
100...500A	Man/Auto	10/15/20/30	1NO-1NC	100D210...D420	193-EELG	£407.00
120...600A	Man/Auto	10/15/20/30	1NO-1NC	100D630...D860	193-EEMH	£574.00
160...800A	Man/Auto	10/15/20/30	1NO-1NC	100D630...D860	193-EENH	£574.00

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Rockwell
Automation

3 • Overloads

Mounting Adaptor



For Use With	Product Code	Price
193ED and 193EE_B	193-EPB	£7.41
193EE_D	193-EPD	£7.41
193EE_E	193-EPE	£8.95
193T1AA/AB/BC	193-T1APM	£7.66

Remote Reset Solenoid - 193T1



Coil	For Use With	Product Code	Price
110V AC	193T1/193K	193-T1RD	£28.20
220...240V AC	193T1/193K	193-T1RKF	£28.20
24V DC	193T1/193K	193-T1RZJ	£28.20

Option Module - 193EE



Network	Jam	Reset	Thermistor Conn.	I/O	Product Code	Price
No	Yes	Yes	No	No	193-EJM	£66.80
No	No	Yes	Yes	No	193-EPT	£66.80
No	No	Yes	No	No	193-ERR	£52.80
DeviceNet	Yes	Yes	No	2 In-1 Out	193-EDN	£165.00
EtherNet/IP	Yes	Yes	No	2 In-1 Out	193-ETN	£250.00
Profibus DP	Yes	Yes	No	2 In-1 Out	193-EPRB	£250.00

External Reset (IP66)



Description	For Use With	Product Code	Price
External reset button	193K/ED/EE	800FP-R611	£7.38
Adjustable reset rod - 141-159mm	193K/ED/EE	800F-ATR08	£3.69

External Reset with Status Indication (IP66)



Description	For Use With	Product Code	Price
External reset with twisted pair connection	193EE + EJM/EPT/ERR	193-ERID	£25.40

DeviceNet Overload Relays - 193EC - E3 Plus



Overload Range	Reset	Trip Class	I/O	For Use With	Product Code	Price
0.4...2A	Man/Auto	5/10/15/20/30	4 In-2 Out	100C09...C23	193-EC2PB	£528.00
1...5A	Man/Auto	5/10/15/20/30	4 In-2 Out	100C09...C23	193-EC2AB	£528.00
3...15A	Man/Auto	5/10/15/20/30	4 In-2 Out	100C09...C23	193-EC2BB	£528.00
5...25A	Man/Auto	5/10/15/20/30	4 In-2 Out	100C09...C23	193-EC2CB	£528.00
5...25A	Man/Auto	5/10/15/20/30	4 In-2 Out	100C30...C43	193-EC2CD	£569.00
9...45A	Man/Auto	5/10/15/20/30	4 In-2 Out	100C30...C43	193-EC2DD	£569.00
18...90A	Man/Auto	5/10/15/20/30	4 In-2 Out	100C60...C97	193-EC2EE	£646.00
28...140A	Man/Auto	5/10/15/20/30	4 In-2 Out	100D115...D180	193-EC3FF	£728.00
42...210A	Man/Auto	5/10/15/20/30	4 In-2 Out	100D115...D180	193-EC3GF	£728.00

Mounting Adaptor - 193EC



For Use With	Product Code	Price
193EC2_B	193-ECPM1	£7.94
193EC2_D	193-ECPM2	£7.94
193EC2_E	193-ECPM3	£9.73

Pass-through Overload Relays - 193ED/EE



Overload Range	Reset	Trip Class	Trip Contacts	Product Code	Price
1...5A	Man/Auto	10/15/20/30	1NO-1NC	193-EECP	£33.60
3.2...16A	Man/Auto	10/15/20/30	1NO-1NC	193-EEDP	£33.60
5.4...27A	Man/Auto	10/15/20/30	1NO-1NC	193-EEEP	£33.60

Thermistor Monitor



Reset	Status	Detection	Voltage	Product Code	Price
Auto/Man/Remote	Non-retentive	Open/Short Circuit	24...48V AC/DC	817S-PTC-48	£40.70
Auto/Man/Remote	Non-retentive	Open/Short Circuit	115V AC	817S-PTC-115	£40.70
Auto/Man/Remote	Non-retentive	Open/Short Circuit	230V AC	817S-PTC-230	£40.70

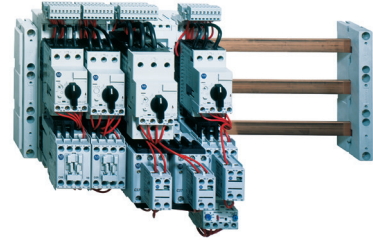
4 • Mounting System

Mounting System

Panel busbar systems combine power distribution with component assembly in one, space saving construction. The versatility of the system allows for future additions whilst simplifying the engineering from both the mechanical and the electrical perspective. Plant maintenance becomes faster and safer by using the ingenious ISO™ modules as a base for compact motor starters and load feeders.

Features and benefits:

- Panel busbar system reduces panel size
- ISO™ modules speed assembly and replacement whilst enhancing safety
- MCS Star software (please enquire) ensures rapid, accurate engineering



Busbar Supports 200...630A



Description	Poles	Product Code	Price
Busbar support	3	141A-TR3	£11.20
Busbar support with terminals	3	141A-TR3F16	£12.10
Busbar end cover	3	141A-TR3E	£2.79
Busbar support	1	141A-TR1	£7.46

Busbars



Current	Size	Length	Product Code	Price
200A	12 x 5mm	2.4m	3580000PP	£14.93
250A	12 x 5mm	2.4m	3581000PP	£20.51
320A	20 x 5mm	2.4m	3582000PP	£23.95
400A	25 x 5mm	2.4m	3583000PP	£36.29
450A	30 x 5mm	2.4m	3584000PP	£36.80
360A	12 x 10mm	2.4m	3580100PP	£30.63
630A	30 x 10mm	2.4m	3586005PP	£74.84

3 Bar Busbar Shroud



Description	Product Code	Price
Busbar shroud	141A-BCF1	£28.20
Busbar shroud holder	141A-BCF1H	£4.26

Single Bar Busbar Cover - Snap-on



Busbar Thickness	Product Code	Price
5mm	141A-BS5	£10.60
10mm	141A-BS10	£11.20

Busbar Terminals



Description	Cable Size	Busbar Thickness	Product Code	Price
Busbar terminal	2.5...16mm ²	5mm	141A-VS116	£0.83

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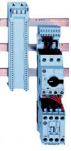
Description	Cable Size	Busbar Thickness	Product Code	Price
Busbar terminal	2.5...16mm ²	10mm	141A-VS216	£1.27
Busbar terminal	4...35mm ²	5mm	141A-VS135	£1.17
Busbar terminal	4...35mm ²	10mm	141A-VS235	£1.85
54mm terminal cover			141A-BK1	£11.00

Busbar Supply Modules 200...630A



Cable Size	Module Width	Product Code	Price
6...70mm ²	54mm	141A-VN370	£18.50
35...120mm ²	81mm	141A-VN3120	£26.00
95...185mm ²	135mm	141A-VN3185	£41.00
Laminated copper	135mm	141A-VN3300F	£51.30

ISO™ Busbar Mounting Modules



Description	Rating	Length	Width	Connection	Product Code	Price
ISO™ module	25A	200mm	45mm	Wires	141A-SS45RR25	£28.10
ISO™ module	25A	200mm	54mm	Wires	141A-SS54RR25	£32.50
ISO™ module	45A	200mm	54mm	Wires	141A-SS54RR45	£34.90
ISO™ module	N/A	200mm	45mm	Mounting only	141A-SS45R	£23.80
ISO™ module	N/A	200mm	54mm	Mounting only	141A-SS54R	£27.50
Spacer module	N/A	200mm	9mm		141A-AS9B	£5.28
Micro switch					141A-AS	£6.20
Connection clip (pack of 50)					141A-AK	£0.26

Busbar Mounting Modules



Description	Rating	Length	Width	Connection	Product Code	Price
Module	25A	200mm	45mm	Wires	141A-GS45RR25	£18.30
Module	25A	200mm	54mm	Wires	141A-GS54RR25	£20.20
Module	45A	200mm	54mm	Wires	141A-GS54RR45	£29.90
Module	N/A	200mm	45mm	Mounting only	141A-GS45R	£15.90
Module	N/A	200mm	54mm	Mounting only	141A-GS54R	£18.40
Spacer module	N/A	200mm	9mm		141A-AS9B	£5.28
Connection clip (pack of 50)					141A-AK	£0.26

MCCB Incomer / Feeder Modules



Description	Use with	Length	Width	Connection	Product Code	Price
Pre-drilled base	140G...&140H...	200mm	90mm	Busbar from top	141A-GHT	£56.00
Pre-drilled base	140G...&140H...	200mm	90mm	Busbar from bottom	141A-GHB	£56.00
Pre-drilled base	140J	190mm	105mm	Studs top or bottom	141A-GJU	£83.20

4 • Mounting System

Busbar Mounting Modules with Terminals



Rating	Length	Width	Cable Size	Product Code	Price
25A	200mm	45mm	6mm	141A-FS45S25	£17.30
63A	200mm	54mm	16mm	141A-FS54S63	£24.20
63A	200mm	81mm	16mm	141A-FS81S63	£31.20

Control Circuit Plugs



Description	Poles	Product Code	Price
Control plug	8	141A-APC8	£9.31
Control plug	10	141A-APC10	£23.00
Control plug	12	141A-APC12	£14.00
Control plug holder		141A-APH	£4.15

Relays and Timers

The Allen-Bradley range covers every possible requirement for timing and control circuit switching. Conventional, contactor-style and plug-in devices are complemented by the space-saving and adaptable 700-HL interface relays, which are an ideal interposing device between control and power switching elements. Choices of standard and solid-state outputs allow the relay to be perfectly matched to the application.

Features and benefits:

- Slim-line option (6.2mm) reduces space and matches cabling requirements
- Plug-in design provides for rapid maintenance and exchange
- Comprehensive range allows exact matching to varied applications



Miniature Control Relays



Contacts	Coil	Diode	Product Code	Price
2NO-2NC	24V AC	No	700-K22Z-KJ	£19.90
3NO-1NC	24V AC	No	700-K31Z-KJ	£19.90
4NO	24V AC	No	700-K40E-KJ	£19.90
2NO-2NC	110V AC	No	700-K22Z-D	£19.90
3NO-1NC	110V AC	No	700-K31Z-D	£19.90
4NO	110V AC	No	700-K40E-D	£19.90
2NO-2NC	230V AC	No	700-K22Z-KF	£19.90
3NO-1NC	230V AC	No	700-K31Z-KF	£19.90
4NO	230V AC	No	700-K40E-KF	£19.90
2NO-2NC	400V AC	No	700-K22Z-KN	£19.90
3NO-1NC	400V AC	No	700-K31Z-KN	£19.90
4NO	400V AC	No	700-K40E-KN	£19.90
2NO-2NC	24V DC	Yes	700-K22Z-DJ	£31.40
3NO-1NC	24V DC	Yes	700-K31Z-DJ	£31.40
4NO	24V DC	Yes	700-K40E-DJ	£31.40

Auxiliary Contacts



Contacts	Product Code	Price
2NO	100-KFA20E	£5.28
2NC	100-KFA02E	£5.28
1NO-1NC	100-KFA11E	£5.28
4NO	100-KFA40E	£9.73
3NO-1NC	100-KFA31Z	£9.73
2NO-2NC	100-KFA22Z	£9.73

Miniature Control Relays

Surge Suppressors



Type	Voltage	Product Code	Price
RC	24...48V AC	100-KFSC50	£8.91
RC	110...280V AC	100-KFSC280	£8.91
RC	380...480V AC	100-KFSC480	£8.91
Varistor	12...55V AC/DC	100-KFSV55	£9.44
Varistor	56...136V AC/DC	100-KFSV136	£9.44
Varistor	137...277V AC/DC	100-KFSV277	£9.44
Diode	12...250V DC	100KFSD250	£5.25

Control Relays



Contacts	Coil	Diode	Product Code	Price
2NO-2NC	24V AC	No	700-CF220KJ	£26.50
3NO-1NC	24V AC	No	700-CF310KJ	£26.50
4NO	24V AC	No	700-CF400KJ	£26.50
2NO-2NC	110V AC	No	700-CF220KD	£26.50
3NO-1NC	110V AC	No	700-CF310KD	£26.50
4NO	110V AC	No	700-CF400KD	£26.50
2NO-2NC	230V AC	No	700-CF220KF	£26.50
3NO-1NC	230V AC	No	700-CF310KF	£26.50
4NO	230V AC	No	700-CF400KF	£26.50
2NO-2NC	400V AC	No	700-CF220KN	£26.50
3NO-1NC	400V AC	No	700-CF310KN	£26.50
4NO	400V AC	No	700-CF400KN	£26.50
2NO-2NC	24V DC	Yes	700-CF220EJ	£46.00
3NO-1NC	24V DC	Yes	700-CF310EJ	£46.00
4NO	24V DC	Yes	700-CF400EJ	£46.00

Auxiliary Contacts



Contacts	Product Code	Price
2NC	100-FA02	£6.10
1NO-1NC	100-FA11	£6.10
2NO	100-FA20	£6.10
2NO-2NC	100-FA22	£11.10
3NO-1NC	100-FA31	£11.10
4NO	100-FA40	£11.10
2NO (1LM)-2NC (1LB)	100-FAL22	£12.60

Timers



Voltage	Function	Type	Range	Product Code	Price
AC	On-delay	Pneumatic	0.3 to 30 secs	100-FPTA30	£47.00
AC	On-delay	Pneumatic	1.8 to 180 secs	100-FPTA180	£47.00

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Voltage	Function	Type	Range	Product Code	Price
AC	Off-delay	Pneumatic	0.3 to 30 secs	100-FPTB30	£49.60
AC	Off-delay	Pneumatic	1.8 to 180 secs	100-FPTB180	£49.60
110...240V	On-delay	Electronic	1 to 30 secs	100-ETA30	£37.30
110...240V	On-delay	Electronic	10 to 180 secs	100-ETA180	£40.50
110...240V	Y/D	Electronic	1 to 30 secs	100-ETY30	£51.40

Latch Attachments



Voltage	Contacts	Product Code	Price
24V 50/60Hz	1NO-1NC	100-FL11KJ	£39.40
110V 50/60Hz	1NO-1NC	100-FL11KD	£39.40
230V 50/60Hz	1NO-1NC	100-FL11KF	£39.40
400V 50/60Hz	1NO-1NC	100-FL11KN	£39.40

DC Interface Modules



Input	Output	Product Code	Price
18...30V DC	110...240V AC	100-JE	£31.90

Surge Suppressors



Type	Voltage	Product Code	Price
RC	24...48V AC	100-FSC48	£9.33
RC	110...280V AC	100-FSC280	£9.33
RC	380...480V AC	100-FSC480	£9.33
Varistor	12...55V AC/DC	100-FSV55	£8.21
Varistor	56...136V AC/DC	100-FSV136	£8.70
Varistor	137...277V AC/DC	100-FSV277	£8.70
Diode	12...250V DC	100-FSD250	£7.60

1-pole Changeover Relay - 700HL



Description	Contacts	Rating	Control	Width	Product Code	Price
Relay	1CO	6A	24V AC/DC	6.2mm	700-HLT1U24	£13.00
Relay	1CO	6A	110V AC/DC	6.2mm	700-HLT1U1	£15.80
Relay	1CO	6A	240V AC/DC	6.2mm	700-HLT1U2	£15.80
Relay	1CO	6A	24V DC	6.2mm	700-HLT1Z24	£11.40
Solid state	1NO	2A	24V DC	6.2mm	700-HLS1Z24	£25.10
20-way jumper - red					700-TBJ20R	£2.45
20-way jumper - grey					700-TBJ20G	£2.45
20-way jumper - blue					700-TBJ20B	£2.45
End barrier					700-HN177	£0.79

5 • Relays & Timers

2-pole Changeover Relay - 700HL



Description	Contacts	Rating	Control	Width	Product Code	Price
Relay	2CO	10A	24V AC/DC	14mm	700-HLT12U24	£15.20
Relay	2CO	10A	110V AC/DC	14mm	700-HLT12U1	£18.30
Relay	2CO	10A	240V AC/DC	14mm	700-HLT12U2	£18.30
Relay	2CO	10A	24V DC	14mm	700-HLT12Z24	£13.20
8-way jumper - red					700-TBJ08R	£2.45
8-way jumper - grey					700-TBJ08G	£2.45
8-way jumper - blue					700-TBJ08B	£2.45
End barrier					700-HN177	£0.79

1-pole Plug-in Relay - 700HK



Description	Contacts	Rating	Control	Product Code	Price
Relay	1CO	16A	24V AC	700-HK36A24	£6.22
Relay	1CO	16A	110V AC	700-HK36A1	£7.15
Relay	1CO	16A	240V AC	700-HK36A2	£10.00
Relay	1CO	16A	24V DC	700-HK36Z24	£5.07
DIN-rail socket				700HN221	£5.49

2-pole Plug-in Relay - 700HK



Description	Contacts	Rating	Control	Product Code	Price
Relay	2CO	8A	24V AC	700-HK32A24	£6.89
Relay	2CO	8A	110V AC	700-HK32A1	£8.02
Relay	2CO	8A	240V AC	700-HK32A2	£10.70
Relay	2CO	8A	24V DC	700-HK32Z24	£5.85
DIN-rail socket				700-HN222	£6.34

2-pole Plug-in Safety Relay - 700HPS



Description	Contacts	Rating	Control	Product Code	Price
Safety Relay	2CO	8A	24V DC	700-HPS2Z24	£11.20
DIN-rail socket				700-HN123	£4.35

4-pole Plug-in Relay - 700HC



Description	Contacts	Rating	Control	Product Code	Price
Relay	4CO	10A	24V AC	700-HC24A24-3	£6.88
Relay	4CO	10A	110V AC	700-HC24A1-3	£6.88
Relay	4CO	10A	240V AC	700-HC24A2-3	£7.34
Relay	4CO	10A	24V DC	700-HC24Z24-3	£6.88
DIN-rail socket				700-HN104	£4.35

Interface Relays • Plug-in Relays

2-pole Plug-in Relay - 700HA



Description	Contacts	Rating	Control	Product Code	Price
Relay	2CO	10A	24V AC	700-HA32A24-3	£9.79
Relay	2CO	10A	120V AC	700-HA32A1	£10.70
Relay	2CO	10A	240V AC	700-HA32A2	£13.40
Relay	2CO	10A	24V DC	700-HA32Z24	£9.50
DIN-rail socket				700-HN100	£3.99
DIN-rail socket (timer/suppressor option)				700-HN204	£4.47

3-pole Plug-in Relay - 700HA



Description	Contacts	Rating	Control	Product Code	Price
Relay	3CO	10A	24V AC	700-HA33A24	£9.44
Relay	3CO	10A	120V AC	700-HA33A1	£11.40
Relay	3CO	10A	240V AC	700-HA33A2	£14.10
Relay	3CO	10A	24V DC	700-HA33Z24	£10.10
DIN-rail socket				700-HN101	£4.49
DIN-rail socket (timer/suppressor option)				700-HN205	£5.00

Multi-function Timer Module



Time Range	Functions	Control	For Use With	Product Code	Price
0.5 sec...1000 h	8	12...240V AC/DC	700HN204/5	700-HT3	£44.60

Surge Suppressors



Type	Control	For Use With	Product Code	Price
RC	6...24V AC/DC	700-HN204/5	700-AR1	£4.86
RC	110...240V AC	700-HN204/5	700-AR2	£4.86
Diode	6...220V DC	700-HN204/5	700-ADR	£1.65

Timing Relays



Time Range	Type	Control	Width	Contacts	Rating	Product Code	Price
0.05s...10hr	On-delay	24...240V AC	17.5mm	1CO	5A	700-FEA3TU23	£38.80
0.05s...10hr	Off-delay	24...240V AC	17.5mm	1CO	5A	700-FEB3TU23	£41.70
0.05s...10hr	Multi-function	24...240V AC	17.5mm	1CO	5A	700-FEM3TU23	£51.70
0.15s...10m	Star/Delta	24...240V AC	17.5mm	1CO	5A	700-FEY2QU23	£51.70
Multi-time	Multi-function	24...240V AC	22.5mm	1CO	8A	700-FSM3UU23	£77.60
Multi-time	Multi-function	24...240V AC	22.5mm	2CO	8A	700-FSM4UU23	£93.60

Circuit Breakers

Reliable circuit protection is an essential part in any control system and 1492 MCBs and 140G MCCBs offer complete protection. A large range of accessories allow these breakers to be quickly adapted and engineered to match individual requirements. Characterised by their high switching capacity and robust construction, the performance of Allen-Bradley circuit breakers is relied upon in every industrial sector.

Features and benefits:

- Space saving dimensions
- Add-on accessories facilitate information feedback and remote operation
- Range of switching capacities allow exact matching to the installation



Miniature Circuit Breakers - Type B



Current	Poles	Type	Product Code	Price
1A	1	B	1492-SPM1B010	£13.00
2A	1	B	1492-SPM1B020	£13.00
4A	1	B	1492-SPM1B040	£13.00
6A	1	B	1492-SPM1B060	£9.85
10A	1	B	1492-SPM1B100	£9.85
16A	1	B	1492-SPM1B160	£9.85
20A	1	B	1492-SPM1B200	£10.50
25A	1	B	1492-SPM1B250	£10.90
32A	1	B	1492-SPM1B320	£11.90



1A	2	B	1492-SPM2B010	£30.70
2A	2	B	1492-SPM2B020	£30.70
4A	2	B	1492-SPM2B040	£30.70
6A	2	B	1492-SPM2B060	£23.70
10A	2	B	1492-SPM2B100	£23.70
16A	2	B	1492-SPM2B160	£23.70
20A	2	B	1492-SPM2B200	£24.80
25A	2	B	1492-SPM2B250	£26.10
32A	2	B	1492-SPM2B320	£28.20



1A	3	B	1492-SPM3B010	£48.60
2A	3	B	1492-SPM3B020	£48.40
4A	3	B	1492-SPM3B040	£48.40
6A	3	B	1492-SPM3B060	£37.50
10A	3	B	1492-SPM3B100	£37.50
16A	3	B	1492-SPM3B160	£37.50
20A	3	B	1492-SPM3B200	£39.70
25A	3	B	1492-SPM3B250	£41.40
32A	3	B	1492-SPM3B320	£44.40

Miniature Circuit Breakers - Type C



Current	Poles	Type	Product Code	Price
1A	1	C	1492-SPM1C010	£12.10
2A	1	C	1492-SPM1C020	£12.10
4A	1	C	1492-SPM1C040	£12.10
6A	1	C	1492-SPM1C060	£9.19
10A	1	C	1492-SPM1C100	£9.19
16A	1	C	1492-SPM1C160	£9.15
20A	1	C	1492-SPM1C200	£9.68
25A	1	C	1492-SPM1C250	£10.20
32A	1	C	1492-SPM1C320	£11.10
40A	1	C	1492-SPM1C400	£12.10
50A	1	C	1492-SPM1C500	£16.00
63A	1	C	1492-SPM1C630	£19.60



1A	2	C	1492-SPM2C010	£28.10
2A	2	C	1492-SPM2C020	£28.10
4A	2	C	1492-SPM2C040	£28.10
6A	2	C	1492-SPM2C060	£21.90
10A	2	C	1492-SPM2C100	£21.90
16A	2	C	1492-SPM2C160	£21.90
20A	2	C	1492-SPM2C200	£23.20
25A	2	C	1492-SPM2C250	£24.30
32A	2	C	1492-SPM2C320	£26.20
40A	2	C	1492-SPM2C400	£28.60
50A	2	C	1492-SPM2C500	£37.10
63A	2	C	1492-SPM2C630	£45.40



1A	3	C	1492-SPM3C010	£44.80
2A	3	C	1492-SPM3C020	£44.80
4A	3	C	1492-SPM3C040	£44.80
6A	3	C	1492-SPM3C060	£34.70
10A	3	C	1492-SPM3C100	£34.70
16A	3	C	1492-SPM3C160	£34.70
20A	3	C	1492-SPM3C200	£36.50
25A	3	C	1492-SPM3C250	£38.80
32A	3	C	1492-SPM3C320	£41.70
40A	3	C	1492-SPM3C400	£45.10
50A	3	C	1492-SPM3C500	£59.00
63A	3	C	1492-SPM3C630	£72.30

Miniature Circuit Breakers - Type D



Current	Poles	Type	Product Code	Price
1A	1	D	1492-SPM1D010	£14.70
2A	1	D	1492-SPM1D020	£14.70
4A	1	D	1492-SPM1D040	£14.70
6A	1	D	1492-SPM1D060	£11.10
10A	1	D	1492-SPM1D100	£11.10
16A	1	D	1492-SPM1D160	£11.10
20A	1	D	1492-SPM1D200	£11.70

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6 • Circuit Breakers

Miniature Circuit Breakers



Current	Poles	Type	Product Code	Price
25A	1	D	1492-SPM1D250	£12.40
32A	1	D	1492-SPM1D320	£13.60
50A	1	D	1492-SPM1D500	£26.60
63A	1	D	1492-SPM1D630	£35.40
1A	2	D	1492-SPM2D010	£33.80
2A	2	D	1492-SPM2D020	£33.80
4A	2	D	1492-SPM2D040	£33.80
6A	2	D	1492-SPM2D060	£25.90
10A	2	D	1492-SPM2D100	£26.00
16A	2	D	1492-SPM2D160	£26.00
20A	2	D	1492-SPM2D200	£27.50
25A	2	D	1492-SPM2D250	£29.10
32A	2	D	1492-SPM2D320	£31.00
40A	2	D	1492-SPM2D400	£34.30
50A	2	D	1492-SPM2D500	£61.20
63A	2	D	1492-SPM2D630	£80.90



1A	3	D	1492-SPM3D010	£53.50
2A	3	D	1492-SPM3D020	£53.50
4A	3	D	1492-SPM3D040	£53.50
6A	3	D	1492-SPM3D060	£41.50
10A	3	D	1492-SPM3D100	£41.50
16A	3	D	1492-SPM3D160	£41.50
20A	3	D	1492-SPM3D200	£43.50
25A	3	D	1492-SPM3D250	£46.20
32A	3	D	1492-SPM3D320	£49.70
40A	3	D	1492-SPM3D400	£53.90
50A	3	D	1492-SPM3D500	£97.80
63A	3	D	1492-SPM3D630	£129.00

Side-mounted Auxiliary Contacts



Current	Contacts	Product Code	Price
2A	1NO-1NC	189-AR11	£11.40
2A	1CO	189-AR3	£11.40

Bottom-mounted Auxiliary Contacts



Current	Contacts	Product Code	Price
2A	1NO	189-AB10	£10.50
2A	1NC	189-AB01	£10.50

Trip Indicating Contacts



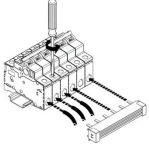
Description	Contacts	Product Code	Price
2A	1CO	189-ASCR3	£23.80

“Padlock Off” Attachment



Description	Product Code	Price
For use with single-pole MCBs	189-ALOA1	£8.52
For use with multi-pole MCBs	189-ALOA2	£8.52

Cut-to-length Comb Busbar



Description	Poles	Length	Product Code	Price
80A pin connection	1	1m	1492-A1B8	£22.50
100A pin connection	1	1m	1492-A1B1	£25.50
80A pin connection	3	1m	1492-A3B8	£59.10
100A pin connection	3	1m	1492-A3B1	£69.80
End cap	1		1492-A1E	£0.75
End cap	3		1492-AME	£0.82
Incoming Terminal (max. 35mm cable)			1492-AAT1S	£2.18
Busbar Power Feed (max. 50mm cable)			1492-AAT2	£2.18
Protective Cover			1492-AAP	£2.08

Residual Current Devices



Current	Sensitivity	Poles	Product Code	Price
25A	30mA	2	1492-RCDA2A25	£61.10
40A	30mA	2	1492-RCDA2A40	£76.40
25A	30mA	4	1492-RCDA4A25	£80.00
40A	30mA	4	1492-RCDA4A40	£101.00
63A	30mA	4	1492-RCDA4A63	£141.00
80A	30mA	4	1492-RCDA4A80	£217.00

125A G Frame MCCB - Complete Devices



Current	Poles	Thermal	Magnetic	Switching Cap	Product Code	Price
63A	3	63A	630A	36kA	140G-G2C3-C63	£175.00
80A	3	80A	800A	36kA	140G-G2C3-C80	£175.00
100A	3	100A	1000A	36kA	140G-G2C3-D10	£193.00
125A	3	125A	1250A	36kA	140G-G2C3-D12	£315.00
160A	3	112...160A	1600A	36kA	140G-G2E3-D16	£339.00
100A	3	100A	1000A	70kA	140G-G6C3-D10	£391.00
125A	3	125A	1250A	70kA	140G-G6C3-D12	£638.00
160A	3	112...160A	1600A	70kA	140G-G6E3-D16	£688.00

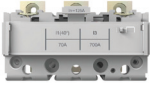
125A H Frame MCCB - Switch Frame Only



Current	Poles	Switching Cap	Product Code	Price
125A	3	36kA	140G-H2X3	£90.00
125A	3	70kA	140G-H6X3	£270.00

6 • Circuit Breakers

125A H Frame MCCB - Thermal/Magnetic Trip Units



Current	Poles	Thermal	Magnetic	Product Code	Price
80A	3	56...80A	400...800A	140G-HTF3-C80	£92.90
100A	3	70...100A	500...1000A	140G-HTF3-D10	£102.00
125A	3	87...125A	625...1250A	140G-HTF3-D12	£167.00

250A J Frame MCCB - Switch Frame Only



Current	Poles	Switching Cap	Product Code	Price
250A	3	36kA	140G-J2X3	£337.00
250A	3	70kA	140G-J6X3	£1280.00

250A J Frame MCCB - Thermal/Magnetic Trip Units



Current	Poles	Thermal	Magnetic	Product Code	Price
160A	3	112...160A	800...1600A	140G-JTF3-D16	£282.00
200A	3	140...200A	1000...2000A	140G-JTF3-D20	£282.00
250A	3	175...250A	1250...2500A	140G-JTF3-D25	£282.00

Auxiliary/Alarm Contacts



Contacts	Frame	Product Code	Price
1 x Auxiliary (250V)	G, H, J	140G-G-EA1A	£33.80
1 x Auxiliary (250V) or 1 x Alarm (250v)	G, H, J	140G-G-EA1AU	£33.80
1 x Auxiliary, 1 x Alarm (250V)	G, H, J	140G-G-EA1R1A	£67.80
2 x Auxiliary, 1 x Alarm (250V)	G, H, J	140G-G-EA2R1A	£101.00

Shunt Trip



Voltage	Frame	Product Code	Price
110...127VAC/110...125VDC	G, H, J	140G-G-SND	£82.70

Undervoltage Release



Voltage	Frame	Product Code	Price
110...127VAC/110...125VDC	G, H, J	140G-G-UVD	£82.70

Terminal Lugs



Description	Frame	Pack	Product Code	Price
2.5...70mm ² Cu wire	G	3	140G-G-TLC13	£13.90
2.5...95mm ² Cu wire	H	3	140G-H-TLC13	£13.90
6...185mm ² Cu wire	J	3	140G-J-TLC13	£15.20

Terminal Covers



Height	Pole	Frame	Pack	Product Code	Price
50mm	3	G	2	140G-G-TC3H	£28.60
50mm	3	H	2	140G-H-TC3H	£28.60
60mm	3	J	2	140G-J-TC3H	£36.20

Rotary Handle and Interlock Kit



Colour	Shaft	Frame	Product Code	Price
Black	304.8mm	G	140G-G-RVM12B	£62.20
Red/Yellow	304.8mm	G	140G-G-RVM12R	£62.20
Black	533.4mm	G	140G-G-RVM21B	£66.20
Red/Yellow	533.4mm	G	140G-G-RVM21R	£66.20
Black	304.8mm	H, J	140G-H-RVM12B	£62.20
Red/Yellow	304.8mm	H, J	140G-H-RVM12R	£62.20
Black	533.4mm	H, J	140G-H-RVM21B	£66.20
Red/Yellow	533.4mm	H, J	140G-H-RVM21R	£66.20

DIN Rail Adaptor



Description	Frame	Product Code	Price
35mm DIN Rail Adaptor	G	140G-G-DRA	£1.71

Fuse Holders



Current	Poles	Indication	Fuse Link	Product Code	Price
30A	1	No	Class CC	1492-FB1C30	£9.15
30A	1	Yes	Class CC	1492-FB1C30L	£13.70
30A	2	No	Class CC	1492-FB2C30	£19.00
30A	2	Yes	Class CC	1492-FB2C30L	£28.00
30A	3	No	Class CC	1492-FB3C30	£29.20
30A	3	Yes	Class CC	1492-FB3C30L	£42.50

Lockable Fuse Holders



Current	Indication	Fuse Link	Product Code	Price
32A	No	IEC 10 x 38	140F-D3F-C30	£32.90
32A	Yes	IEC 10 x 38	140F-D3F-C30L	£46.10

Isolators & Switch Fuses

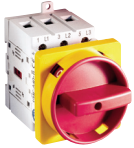
With high IP standard (IP65...66) across the range, these cleverly designed panel mounting and enclosed switches are among the most adaptable on the market. All 3-pole devices can be easily combined to form 4 or 6-pole variants and most accessories are common to all devices. On the surface mounting switches, the lid is mechanically interlocked with the base in the ON position and every enclosure comes with four metric knockouts.

Features and benefits:

- High protection standard facilitates use in harsh environments
- Versatile design permits rapid, secure and straightforward customisation
- 7 switch ratings allow economic matching to the exact motor frame size



Isolator - Base-mounted with handle



Current	kW	Poles	Product Code	Price
16A	7.5kW	3	194E-A16-1753-4N	£17.40
25A	11kW	3	194E-A25-1753-6N	£22.40
32A	15kW	3	194E-A32-1753-6N	£24.30
40A	18.5kW	3	194E-A40-1753-6N	£27.20
63A	22kW	3	194E-A63-1753-6N	£33.00
80A	37kW	3	194E-A80-1753-6N	£44.50
100A	45kW	3	194E-A100-1753-6N	£53.60

Isolator - Front-mounted with handle



Current	kW	Poles	Product Code	Price
16A	7.5kW	3	194E-E16-1753-4N	£15.80
25A	11kW	3	194E-E25-1753-6N	£20.10
32A	15kW	3	194E-E32-1753-6N	£20.40
40A	18.5kW	3	194E-E40-1753-6N	£24.40
63A	22kW	3	194E-E63-1753-6N	£27.00
80A	37kW	3	194E-E80-1753-6N	£40.10
100A	45kW	3	194E-E100-1753-6N	£50.20

Isolator - Insulated Enclosure (IP66)



Current	kW	Poles	Product Code	Price
16A	7.5kW	3	194E-Y16M-1753-4N	£20.40
25A	11kW	3	194E-Y25M-1753-6N	£32.50
32A	15kW	3	194E-Y32M-1753-6N	£33.50
40A	18.5kW	3	194E-Y40M-1753-6N	£42.60
63A	22kW	3	194E-Y63M-1753-6N	£45.10
80A	37kW	3	194E-Y80M-1753-6N	£62.90
100A	45kW	3	194E-Y100M-1753-6N	£70.90
16A	7.5kW	6	194E-Y16M-1756-6N	£41.10
25A	11kW	6	194E-Y25M-1756-6N	£65.00
32A	15kW	6	194E-Y32M-1756-6N	£66.90
40A	18.5kW	6	194E-Y40M-1756-6N	£57.10
63A	22kW	6	194E-Y63M-1756-6N	£90.50

Isolators (16...100A)

Isolator - Stainless Steel Enclosure



Current	kW	Poles	Product Code	Price
16A	7.5kW	3	RU194E-YC16-1753-6N	£124.80
25A	11kW	3	RU194E-YC25-1753-6N	£124.80
32A	15kW	3	RU194E-YC32-1753-6N	£130.27

Shaft Extensions



Length	Material	Stackable	Product Code	Price
52mm	Insulated	No	194L-G3194	£0.77
57mm	Insulated	No	194L-G3195	£0.87
24mm	Insulated	Yes (max. 4)	194L-G2853	£1.39
90...235mm	Metal	No	194L-G3393	£5.42
230...350mm	Metal	No	194L-G3394	£7.08

Terminal Covers



For Use With	Poles	Product Code	Price
16A	3	194E-16-C3	£1.29
25/32A	3	194E-25-C3	£1.46
40/63A	3	194E-40-C3	£1.75
80/100A	3	194E-80-C3	£2.40

Auxiliary Contacts



Contacts	Type	For Use With	Switch	Product Code	Price
1NO-1NC	Std	25...100A	Base-mounted	194E-A-P11	£7.20
2NO-2NC	Std	25...100A	Base-mounted	194E-A-P22	£14.40
1NC	Early Break	16A	Base-mounted	194E-A16-PD10	£7.20
1NC	Early Break	25...100A	Base-mounted	194E-A-PD10	£7.20
1NO-1NC	Early Make/Late Break	25...100A	Base-mounted	194E-A-PL11	£7.20
1NO-1NC	Std	25...100A	Front-mounted	194E-E-P11	£7.20
2NO-2NC	Std	25...100A	Front-mounted	194E-E-P22	£14.40
1NC	Early Break	16A	Front-mounted	194E-E16-PD10	£7.20
1NC	Early Break	25...100A	Front-mounted	194E-E-PD10	£7.20
1NO-1NC	Early Make/Late Break	25...100A	Front-mounted	194E-EPL11	£7.20

Neutral Terminal



For Use With	Switch	Product Code	Price
16A	Base-mounted	194E-A-16-TN	£3.67
25...32A	Base-mounted	194E-A32-TN	£3.73
40...63A	Base-mounted	194E-A63-TN	£4.95
80...100A	Base-mounted	194E-A100-TN	£7.48
16A	Front-mounted	194E-E16-TN	£3.67
25...32A	Front-mounted	194E-E32-TN	£3.56
40...63A	Front-mounted	194E-E63-TN	£4.91
80...100A	Front-mounted	194E-E100-TN	£7.20

7 • Isolators & Switch Fuses

Earth Terminal



For Use With	Switch	Product Code	Price
16A	Base-mounted	194E-A16-PE	£3.67
25...32A	Base-mounted	194E-A32-PE	£3.73
40...63A	Base-mounted	194E-A63-PE	£4.95
80...100A	Base-mounted	194E-A100-PE	£7.48
16A	Front-mounted	194E-E16-PE	£3.67
25...32A	Front-mounted	194E-E32-PE	£3.67
40...63A	Front-mounted	194E-E63-PE	£4.91
80...100A	Front-mounted	194E-E100-PE	£7.20

Fourth Pole



For Use With	Switch	Product Code	Price
16A	Base-mounted	194E-A16-NP	£4.48
25A	Base-mounted	194E-A25-NP	£4.95
32A	Base-mounted	194E-A32-NP	£6.14
40A	Base-mounted	194E-A40-NP	£6.79
63A	Base-mounted	194E-A63-NP	£8.16
80A	Base-mounted	194E-A80-NP	£9.52
100A	Base-mounted	194E-A100-NP	£12.00
16A	Front-mounted	194E-E16-NP	£4.48
25A	Front-mounted	194E-E25-NP	£4.95
32A	Front-mounted	194E-E32-NP	£6.14
40A	Front-mounted	194E-E40-NP	£6.79
63A	Front-mounted	194E-E63-NP	£8.16
80A	Front-mounted	194E-E80-NP	£9.52
100A	Front-mounted	194E-E100-NP	£12.00

Isolator - Base-mounted



Current	kW	Poles	Product Code	Price
125A	63kW	3	194R-NE125-1753	£77.90
160A	80kW	3	194R-NE160-1753	£89.70
250A	132kW	3	194R-NE250-1753	£174.00
400A	220kW	3	194R-NE400-1753	£330.00

BS88 Switch Fuses - Base-mounted



Current	kW	Poles	Fuse Size	Product Code	Price
20A	11kW	3	A1	194R-B20-1753	£88.20
32A	18.5kW	3	A1	194R-B32-1753	£94.60
63A	30kW	3	A3	194R-B63-1753	£120.00
100A	57kW	3	A4	194R-B100-1753	£99.30
160A	80kW	3	A4	194R-B160-1753	£222.00
200A	100kW	3	B1-B2	194R-B200-1753	£371.00
250A	132kW	3	B1-B3	194R-B250-1753	£371.00
400A	220kW	3	B1-B4	194R-B400-1753	£386.00

Isolators (16...100A) • Isolators (125...400A) • Switch Fuses

Operating Handles



Actuator Colour	Test Position	For Use With	Product Code	Price
Red/Yellow	No	Switch Fuse 20...63A	194R-PY	£13.60
Red/Yellow	Yes	Switch Fuse 20...63A	194R-PYT	£14.40
Black	No	Switch Fuse 20...63A	194R-PB	£13.60
Black	Yes	Switch Fuse 20...63A	194R-PBT	£14.40
Red/Yellow	No	Isolator & Switch Fuse 100...400A	194R-HM4E	£27.20
Black	No	Isolator & Switch Fuse 100...400A	194R-HM4	£27.20

Shaft Extension



Length	Material	For Use With	Product Code	Price
305mm	Metal	Switch Fuse 20...63A	194R-S1	£5.71
533mm	Metal	Switch Fuse 20...63A	194R-S2	£7.54
320mm	Metal	Isolator & Switch Fuse 100...400A	194R-R7	£13.10
580mm	Metal	Isolator & Switch Fuse 100...400A	194R-R8	£24.20

Terminal Covers



For Use With	Poles	Product Code	Price
Isolator 125...160A	3	194R-LNC7	£8.70
Isolator 200...250A	3	194R-LNC9	£11.40
Isolator 400A	3	194R-LNC11	£21.30
Switch Fuse 20...32A	3	194R-30C3	£2.83
Switch Fuse 63A	3	194R-60C3	£3.90
Switch Fuse 100...160A	3	194R-LNC27	£8.70
Switch Fuse 200...400A	3	194R-LNC28	£11.40

Auxiliary Contacts



Contacts	Type	Terminals	For Use With	Product Code	Price
1 change-over	Std	Push-on	Isolator 125...400A	194R-1STNONC	£3.99
2 change-over	Std	Push-on	Isolator 125...400A	194R-2NDNONC	£4.95
1 NO	Std	Screw	Switch Fuse	800F-X10	£2.19
1 NC	Std	Screw	Switch Fuse	800F-X01	£2.19

8 • Pushbuttons & Control Switches

Pushbuttons and Control Switches

Combining ergonomic design with advanced functionality the 800F range brings the best-of-both-worlds to engineers and machine builders. With bifurcated contacts used throughout good control circuit integrity is assured, whilst LED indicators offer extended life and high reliability. With a choice of metal or plastic operators this range offers better performance and economy than the market leader. Please, do the comparison and you will be convinced.



Features and benefits:

- Snap-together construction provides rapid and secure assembly
- Self-monitoring contacts (e-stop) indicate condition of safety circuits
- Clearly marked and positive selectors assure accurate position indication

Pushbuttons - Flush



Type	Bezel	Material	Insert	IP Rating	Product Code	Price
Momentary	Black	Plastic	White	IP66	800FP-F1	£3.62
Momentary	Black	Plastic	Black	IP66	800FP-F2	£3.62
Momentary	Black	Plastic	Green	IP66	800FP-F3	£3.62
Momentary	Black	Plastic	Red	IP66	800FP-F4	£3.62
Momentary	Black	Plastic	Yellow	IP66	800FP-F5	£3.62
Momentary	Black	Plastic	Blue	IP66	800FP-F6	£3.62
Momentary	Black	Plastic	Green/START	IP66	800FP-F301	£3.99
Momentary	Black	Plastic	Green/I	IP66	800FP-F306	£3.99
Momentary	Black	Plastic	White/→	IP66	800FP-F208	£3.99
Momentary	Chrome	Metal	White	IP66	800FM-F1	£3.87
Momentary	Chrome	Metal	Black	IP66	800FM-F2	£3.87
Momentary	Chrome	Metal	Green	IP66	800FM-F3	£3.87
Momentary	Chrome	Metal	Red	IP66	800FM-F4	£3.87
Momentary	Chrome	Metal	Yellow	IP66	800FM-F5	£3.87
Momentary	Chrome	Metal	Blue	IP66	800FM-F6	£3.87
Momentary	Chrome	Metal	Green/START	IP66	800FM-F301	£4.20
Momentary	Chrome	Metal	Green/I	IP66	800FM-F306	£4.20
Momentary	Chrome	Metal	White/→	IP66	800FM-F208	£4.20

Pushbuttons - Extended



Type	Bezel	Material	Insert	IP Rating	Product Code	Price
Momentary	Black	Plastic	White	IP66	800FP-E1	£4.43
Momentary	Black	Plastic	Black	IP66	800FP-E2	£4.43
Momentary	Black	Plastic	Green	IP66	800FP-E3	£4.43
Momentary	Black	Plastic	Red	IP66	800FP-E4	£4.43
Momentary	Black	Plastic	Yellow	IP66	800FP-E5	£4.43
Momentary	Black	Plastic	Blue	IP66	800FP-E6	£4.43
Momentary	Black	Plastic	Red/STOP	IP66	800FP-E402	£4.76
Momentary	Black	Plastic	Red/O	IP66	800FP-E405	£4.76

Continued on next page

Type	Bezel	Material	Insert	IP Rating	Product Code	Price
Momentary	Chrome	Metal	White	IP66	800FM-E1	£4.66
Momentary	Chrome	Metal	Black	IP66	800FM-E2	£4.66
Momentary	Chrome	Metal	Green	IP66	800FM-E3	£4.66
Momentary	Chrome	Metal	Red	IP66	800FM-E4	£4.66
Momentary	Chrome	Metal	Yellow	IP66	800FM-E5	£4.66
Momentary	Chrome	Metal	Blue	IP66	800FM-E6	£4.66
Momentary	Chrome	Metal	Red/STOP	IP66	800FM-E402	£5.00
Momentary	Chrome	Metal	Red/O	IP66	800FM-E405	£5.00

Pushbuttons - Guarded



Type	Bezel	Material	Insert	IP Rating	Product Code	Price
Momentary	Black	Plastic	White	IP66	800FP-G1	£4.44
Momentary	Black	Plastic	Black	IP66	800FP-G2	£4.44
Momentary	Black	Plastic	Green	IP66	800FP-G3	£4.44
Momentary	Black	Plastic	Red	IP66	800FP-G4	£4.44
Momentary	Black	Plastic	Yellow	IP66	800FP-G5	£4.44
Momentary	Black	Plastic	Blue	IP66	800FP-G6	£4.44

Momentary	Chrome	Metal	White	IP66	800FM-G1	£4.66
Momentary	Chrome	Metal	Black	IP66	800FM-G2	£4.66
Momentary	Chrome	Metal	Green	IP66	800FM-G3	£4.66
Momentary	Chrome	Metal	Red	IP66	800FM-G4	£4.66
Momentary	Chrome	Metal	Yellow	IP66	800FM-G5	£4.66
Momentary	Chrome	Metal	Blue	IP66	800FM-G6	£4.66

Pushbuttons - Mushroom



Type	Bezel	Material	Head Dia.	Head Colour	IP Rating	Product Code	Price
Momentary	Black	Plastic	40mm	Black	IP66	800FP-MM42	£5.27
Momentary	Black	Plastic	40mm	Green	IP66	800FP-MM43	£5.27
Momentary	Black	Plastic	40mm	Red	IP66	800FP-MM44	£5.27
Momentary	Black	Plastic	40mm	Yellow	IP66	800FP-MM45	£5.27
Momentary	Black	Plastic	40mm	Blue	IP66	800FP-MM46	£5.27
Momentary	Black	Plastic	90mm	Black	IP66	800FP-MM92	£11.20
Momentary	Black	Plastic	90mm	Red	IP66	800FP-MM94	£11.20
Momentary	Black	Plastic	90mm	Yellow	IP66	800FP-MM95	£11.20

Momentary	Chrome	Metal	40mm	Black	IP66	800FM-MM42	£5.52
Momentary	Chrome	Metal	40mm	Green	IP66	800FM-MM43	£5.52
Momentary	Chrome	Metal	40mm	Red	IP66	800FM-MM44	£5.52
Momentary	Chrome	Metal	40mm	Yellow	IP66	800FM-MM45	£5.52
Momentary	Chrome	Metal	40mm	Blue	IP66	800FM-MM46	£5.52

Pushbuttons - Emergency Stop



Reset	Bezel	Material	Head Dia.	Illuminated	IP Rating	Product Code	Price
Turn	Yellow	Plastic	30mm	No	IP66	800FP-MT34	£10.70
Turn	Yellow	Plastic	40mm	No	IP66	800FP-MT44	£10.70
Turn	Yellow	Plastic	60mm	No	IP66	800FP-MT64	£10.70
Pull	Yellow	Plastic	40mm	No	IP66	800FP-MP44	£10.70
Pull	Black	Plastic	90mm	No	IP66	800FP-MP94	£14.80

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8 • Pushbuttons & Control Switches

Reset	Bezel	Material	Head Dia.	Illuminated	IP Rating	Product Code	Price
Key	Yellow	Plastic	40mm	No	IP66	800FP-MK44	£20.40
Turn	Chrome	Metal	30mm	No	IP66	800FM-MT34	£11.10
Turn	Chrome	Metal	40mm	No	IP66	800FM-MT44	£11.10
Turn	Chrome	Metal	60mm	No	IP66	800FM-MT64	£11.10
Pull	Chrome	Metal	40mm	No	IP66	800FM-MP44	£11.10
Key	Chrome	Metal	40mm	No	IP66	800FM-MK44	£20.70
Turn	Yellow	Plastic	40mm	Yes	IP66	800FPLM-T44	£12.60
Pull	Yellow	Plastic	40mm	Yes	IP66	800FPLM-P44	£12.60
Pull	Black	Plastic	90mm	Yes	IP66	800FPLM-P94	£17.10
Turn	Chrome	Metal	40mm	Yes	IP66	800FM-LMT44	£12.70
Pull	Chrome	Metal	40mm	Yes	IP66	800FM-LMP44	£12.70

Pushbuttons • Illuminated Pushbuttons

Twin Pushbuttons



Type	Bezel	Material	Insert Top	Insert Bottom	IP Rating	Product Code	Price
Momentary Black	Plastic	Green - blank	Red - blank	IP66	800FP-U2E4F3	£7.16	
Momentary Black	Plastic	Green - 1	Red - O	IP66	800FP-U2EFFE	£7.17	
Momentary Black	Plastic	Green - START	Red - STOP	IP66	800FP-U2EBFA	£7.17	

Illuminated Pushbuttons - Flush



Type	Bezel	Material	Lens Colour	IP Rating	Product Code	Price
Momentary	Black	Plastic	Green	IP66	800FP-LF3	£4.44
Momentary	Black	Plastic	Red	IP66	800FP-LF4	£4.44
Momentary	Black	Plastic	Yellow	IP66	800FP-LF5	£4.44
Momentary	Black	Plastic	Blue	IP66	800FP-LF6	£4.44
Momentary	Black	Plastic	Clear	IP66	800FP-LF7	£4.44
Momentary	Chrome	Metal	Green	IP66	800FM-LF3	£4.66
Momentary	Chrome	Metal	Red	IP66	800FM-LF4	£4.66
Momentary	Chrome	Metal	Yellow	IP66	800FM-LF5	£4.66
Momentary	Chrome	Metal	Blue	IP66	800FM-LF6	£4.66
Momentary	Chrome	Metal	Clear	IP66	800FM-LF7	£4.66

Illuminated Pushbuttons - Extended



Type	Bezel	Material	Lens	IP Rating	Product Code	Price
Momentary	Black	Plastic	Green	IP66	800FP-LE3	£4.44
Momentary	Black	Plastic	Red	IP66	800FP-LE4	£4.44
Momentary	Black	Plastic	Yellow	IP66	800FP-LE5	£4.44
Momentary	Black	Plastic	Blue	IP66	800FP-LE6	£4.44
Momentary	Black	Plastic	Clear	IP66	800FP-LE7	£4.44
Momentary	Chrome	Metal	Green	IP66	800FM-LE3	£4.66
Momentary	Chrome	Metal	Red	IP66	800FM-LE4	£4.66
Momentary	Chrome	Metal	Yellow	IP66	800FM-LE5	£4.66
Momentary	Chrome	Metal	Blue	IP66	800FM-LE6	£4.66
Momentary	Chrome	Metal	Clear	IP66	800FM-LE7	£4.66

Reset Operators



Description	Type	Bezel	Material	Insert	Product Code	Price
Operator	Momentary	Black	Plastic	Blue - "R"	800FP-R611	£7.38
Operator	Momentary	Chrome	Metal	Blue - "R"	800FM-R611	£7.63
Reset rod	34...52mm		Metal		800F-ATR01	£3.69
Reset rod	50...67mm		Metal		800F-ATR02	£3.69
Reset rod	80...98mm		Metal		800F-ATR04	£3.69
Reset rod	110...128mm		Metal		800F-ATR06	£3.69
Reset rod	141...159mm		Metal		800F-ATR08	£3.69
Reset rod	157...326mm		Metal		800F-ATR19	£3.69

Pilot Lights



Bezel	Material	Lens	Product Code	Price
Black	Plastic	Green	800FP-P3	£2.47
Black	Plastic	Red	800FP-P4	£2.47
Black	Plastic	Yellow	800FP-P5	£2.47
Black	Plastic	Blue	800FP-P6	£2.47
Black	Plastic	Clear	800FP-P7	£2.47
Chrome	Metal	Green	800FM-P3	£2.70
Chrome	Metal	Red	800FM-P4	£2.70
Chrome	Metal	Yellow	800FM-P5	£2.70
Chrome	Metal	Blue	800FM-P6	£2.70
Chrome	Metal	Clear	800FM-P7	£2.70

Selectors - 2-position



Spring Return	Handle	Bezel	Material	Product Code	Price
60° maintained	Knob	Black	Plastic	800FP-SM22	£6.10
60° from left	Knob	Black	Plastic	800FP-SL22	£6.10
60° from right	Knob	Black	Plastic	800FP-SR22	£6.10
60° maintained	Lever	Black	Plastic	800FP-HM22	£6.98
60° from left	Lever	Black	Plastic	800FP-HL22	£6.98
60° from right	Lever	Black	Plastic	800FP-HR22	£6.98
60° maintained	Knob	Chrome	Metal	800FM-SM22	£6.34
60° from left	Knob	Chrome	Metal	800FM-SL22	£6.34
60° from right	Knob	Chrome	Metal	800FM-SR22	£6.34
60° maintained	Lever	Chrome	Metal	800FM-HM22	£7.27
60° from left	Lever	Chrome	Metal	800FM-HL22	£7.27
60° from right	Lever	Chrome	Metal	800FM-HR22	£7.27

Selectors - 3-position



Spring Return	Handle	Bezel	Material	Product Code	Price
60° maintained	Knob	Black	Plastic	800FP-SM32	£6.10
60° from left	Knob	Black	Plastic	800FP-SL32	£6.10
60° from right	Knob	Black	Plastic	800FP-SR32	£6.10

Continued on next page

8 • Pushbuttons & Control Switches

Spring Return	Handle	Bezel	Material	Product Code	Price
60° from left and right	Knob	Black	Plastic	800FP-SB32	£6.10
60° maintained	Lever	Black	Plastic	800FP-HM32	£6.98
60° from left	Lever	Black	Plastic	800FP-HL32	£6.98
60° from right	Lever	Black	Plastic	800FP-HR32	£6.98
60° from left and right	Lever	Black	Plastic	800FP-HB32	£6.98
60° maintained	Knob	Chrome	Metal	800FM-SM32	£6.34
60° from left	Knob	Chrome	Metal	800FM-SL32	£6.34
60° from right	Knob	Chrome	Metal	800FM-SR32	£6.34
60° from left and right	Knob	Chrome	Metal	800FM-SB32	£6.34
60° maintained	Lever	Chrome	Metal	800FM-HM32	£7.27
60° from left	Lever	Chrome	Metal	800FM-HL32	£7.27
60° from right	Lever	Chrome	Metal	800FM-HR32	£7.27
60° from left and right	Lever	Chrome	Metal	800FM-HB32	£7.27

Selectors - 4-position



Position	Handle	Bezel	Material	Product Code	Price
45° maintained	Knob	Black	Plastic	800FP-SM42	£6.17
45° maintained	Knob	Chrome	Metal	800FM-SM42	£6.46

Key Selectors - 2-position



Spring Return	Key Release	Bezel	Material	Product Code	Price
60° maintained	Left	Black	Plastic	800FP-KM21	£19.00
60° maintained	Right	Black	Plastic	800FP-KM22	£19.00
60° maintained	Both	Black	Plastic	800FP-KM23	£19.00
60° from right	Left	Black	Plastic	800FP-KR21	£19.00
60° maintained	Left	Chrome	Metal	800FM-KM21	£19.40
60° maintained	Right	Chrome	Metal	800FM-KM22	£19.40
60° maintained	Both	Chrome	Metal	800FM-KM23	£19.40
60° from right	Left	Chrome	Metal	800FM-KR21	£19.40

Key Selectors - 3-position



Spring Return	Key Release	Bezel	Material	Product Code	Price
60° maintained	Left	Black	Plastic	800FP-KM31	£19.00
60° maintained	All	Black	Plastic	800FP-KM33	£19.00
60° maintained	Centre	Black	Plastic	800FP-KM34	£19.00
60° maintained	Left and centre	Black	Plastic	800FP-KM35	£19.00
60° maintained	Left	Chrome	Metal	800FM-KM31	£19.40
60° maintained	All	Chrome	Metal	800FM-KM33	£19.40
60° maintained	Centre	Chrome	Metal	800FM-KM34	£19.40
60° maintained	Left and centre	Chrome	Metal	800FM-KM35	£19.40

Potentiometers



Description	IP Rating	Product Code	Price
Operator	IP65	800FP-POT	£11.20
150Ω potentiometer		800FP-POT1	£28.10
500Ω potentiometer		800FP-POT2	£28.10
1000Ω potentiometer		800FP-POT3	£28.10
2500Ω potentiometer		800FP-POT4	£28.10
5000Ω potentiometer		800FP-POT5	£28.10
10000Ω potentiometer		800FP-POT6	£28.10

Mounting Latches



Material	Product Code	Price
Plastic	800F-ALP	£1.11
Metal	800F-ALM	£1.48

Contact Blocks - Latch-mounted



Contacts	Product Code	Price
1NO	800F-X10	£2.19
1NC	800F-X01	£2.19
1NO, early make	800F-X10E	£2.19
1NC, late break	800F-X01L	£2.19
1NC, self-monitoring	800F-X01S	£8.14
1NO, low voltage	800F-X10V	£5.28
1NC, low voltage	800F-X01V	£5.28
2NO, dual circuit	800F-X20D	£5.28
2NC, dual circuit	800F-X02D	£5.28
1NO-1NC, dual circuit	800F-X11D	£5.28

Contact Blocks - Base-mounted



Contacts	Product Code	Price
1NO	800F-BX10	£2.19
1NC	800F-BX01	£2.19
1NO, early make	800F-BX10E	£2.19
1NC, late break	800F-BX01L	£2.19

Incandescent Lamp Elements - Latch-mounted



Description	Voltage	Product Code	Price
Lamp element	-	800F-D0C	£1.35
Incandescent lamp	6V AC/DC	800F-N65	£0.93
Incandescent lamp	12V AC/DC	800F-N141	£0.93
Incandescent lamp	24V AC/DC	800F-N157	£0.93
Incandescent lamp	48V AC/DC	800F-N48	£0.93
Incandescent lamp	130V AC/DC	800F-N130	£1.58
Neon lamp	240V AC	800F-N240	£2.71

Rockwell Automation Connected Components



Connected Components Accelerator Toolkit

Connected Components Accelerator Toolkit (CCAT) helps reduce the design overhead so you can concentrate on making your machine the best in the market.

Supporting starters to servo drives, alarm handling to pump control, the CCAT includes the products and applications your machine needs. To see how CCAT can save 50% to 75% of the engineering time on your next machine design go to www.rockwellautomation.com/go/cc



Micro800® Control Platform

Each controller is optimised for cost and performance for specific applications with customisation and flexibility in mind.

The Allen-Bradley® Micro800 PLC family, together with the Connected Components Workbench™ software, sets a new global standard for ease of use, while providing enough control capability to match your application requirements. With a wide range of network protocols, finding the right controller to fit your communication needs is easy. TouchProbe provides a cost effective method for achieving exact position registration.



PowerFlex® Compact Drives

Designed for ease of use, this general purpose class of drives provides a compact package to optimise panel space and application versatility.

PowerFlex® AC drives deliver a simple and cost-effective solution for standalone machine level control applications or simple system integration.

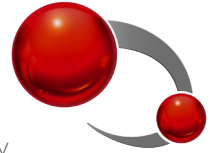


Allen-Bradley

Connected Components Workbench Software

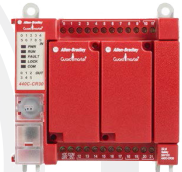
Making it easier to Configure, Program, and Visualise.

Connected Components Workbench Software helps simplify standalone machine development by programming all your products with one software. The standard edition is available as a free web download or free DVD. Developer edition offers additional features for an enhanced user experience.



Guardmaster® CR30 Configurable Safety Relay

This relay is ideal for applications requiring as many as ten dual-channel safety circuits and controlling as many as five output zones.



The Guardmaster® 440C-CR30 Software Configurable Safety Relay is flexible, cost-effective, and easy to use.

You can configure this relay by selecting certified safety function blocks to rapidly build your applications. This relay is completely integrated with Allen-Bradley Logix controllers and can be configured using Studio 5000 Logix Designer® software or Connected Components Workbench software.

PanelView™ 800 Graphic Terminals

Optimised for compatibility with Micro800 controllers, these graphic terminals offer built-in Ethernet and serial communication ports to support a variety of protocols.



The PanelView 800 family from Rockwell Automation provides a compact space-saving design with a high speed processor and high-resolution touch screen display with 65K colors. Preferred integration with Allen-Bradley micro controllers offers you an ideal control and visualisation solution for a wide variety of applications.

For more information www.rockwellautomation.com/go/cc

8 • Pushbuttons & Control Switches

LED Elements - Latch-mounted



Voltage	Colour	For Use With	Product Code	Price
24V AC/DC	Green	Green	800F-N3G	£5.10
24V AC/DC	Red	Red	800F-N3R	£5.10
24V AC/DC	White	White/Blue/Yellow	800F-N3W	£5.10
120V AC	Green	Green	800F-N5G	£5.10
120V AC	Red	Red	800F-N5R	£5.10
120V AC	White	White/Blue/Yellow	800F-N5W	£5.10
240V AC	Green	Green	800F-N7G	£5.10
240V AC	Red	Red	800F-N7R	£5.10
240V AC	White	White/Blue/Yellow	800F-N7W	£5.10

LED Elements - Base-mounted



Voltage	Colour	For Use With	Product Code	Price
24V AC/DC	Green	Green	800F-BN3G	£5.10
24V AC/DC	Red	Red	800F-BN3R	£5.10
24V AC/DC	White	White/Blue/Yellow	800F-BN3W	£5.10
120V AC	Green	Green	800F-BN5G	£5.10
120V AC	Red	Red	800F-BN5R	£5.10
120V AC	White	White/Blue/Yellow	800F-BN5W	£5.10
240V AC	Green	Green	800F-BN7G	£5.10
240V AC	Red	Red	800F-BN7R	£5.10
240V AC	White	White/Blue/Yellow	800F-BN7W	£5.10

Legend Frames/Plates



Description	Size	Plate Colour	Product Code	Price
Frame	30 x 40mm	N/A	800F-110	£0.61
Frame	30 x 50mm	N/A	800F-120	£0.61
Blank plate	30 x 40mm	Black	800F-17BE100	£0.27
Blank plate	30 x 40mm	White	800F-17WE100	£0.27
Blank plate	30 x 50mm	Black	800F-18BE100	£0.27
Blank plate	30 x 50mm	White	800F-18WE100	£0.27
Frame with blank plate	30 x 40mm	Black	800F-11BE100	£1.04
Frame with blank plate	30 x 40mm	White	800F-11WE100	£1.04
Frame with blank plate	30 x 50mm	Black	800F-12BE100	£1.04
Frame with blank plate	30 x 50mm	White	800F-12WE100	£1.04

Emergency Stop Legends



Fixing Hole	Disc Dia.	Colour	Text	Product Code	Price
22.5mm	60mm	Yellow	Blank	800F-15YS	£1.14
22.5mm	60mm	Yellow	EMERGENCY STOP	800F-15YSE112	£1.52
30mm	60mm	Yellow	Blank	800F-15Y	£1.14
30mm	90mm	Yellow	Blank	800F-16Y	£1.14
30mm	60mm	Yellow	EMERGENCY STOP	800F-15YE112	£1.52
30mm	90mm	Yellow	EMERGENCY STOP	800F-16YE112	£1.51

Blanking Plug



Colour	Material	IP Rating	Product Code	Price
Grey	Plastic	IP66	800F-N8	£1.78
Black	Plastic	IP66	800F-N2	£1.78

Protective Boots



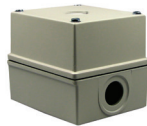
For Use With	Material	IP Rating	Product Code	Price
Flush pushbutton	Silicone	IP66	800F-AB7	£1.44
Extended pushbutton	Silicone	IP66	800F-ABE7	£1.44
Twin pushbutton	Silicone	IP66	800F-AUB2	£3.52

Mounting Ring/Lamp Tools



Description	Product Code	Price
Mounting ring wrench	800F-AW2	£2.70
Lamp removal tool	800F-ALR1	£2.70

Enclosures



Colour	Material	Gang	IP Rating	Product Code	Price
Yellow	Plastic	1	IP66	800F-1YM	£9.78
Grey	Plastic	1	IP66	800F-1PM	£9.78
Grey	Plastic	2	IP66	800F-2PM	£10.60
Grey	Plastic	3	IP66	800F-3PM	£13.10
Grey	Plastic	4	IP66	800F-4PM	£15.70
Grey	Plastic	6	IP66	800F-6PM	£20.30
Grey	Aluminium	1	IP66	800F-1MM	£22.70
Grey	Aluminium	2	IP66	800F-2MM	£25.70
Grey	Aluminium	3	IP66	800F-3MM	£31.90
Grey	Aluminium	5	IP66	800F-5MM	£42.60

Emergency Stop Stations



Enclosure	Reset	Head Dia.	Contacts	IP Rating	Product Code	Price
Yellow plastic	Turn	40mm	1NC	IP66	800F-1YM1	£24.20
Yellow plastic	Turn	40mm	1NO-1NC	IP66	800F-1YM2	£26.10
Yellow plastic	Turn	40mm	2NC	IP66	800F-1YM3	£26.10
Yellow plastic	Pull	90mm	1NC	IP66	800F-1YM1HD	£26.20
Yellow plastic	Pull	90mm	1NO-1NC	IP66	800F-1YM2HD	£28.00
Yellow plastic	Pull	90mm	2NC	IP66	800F-1YM3HD	£28.00
Yellow plastic	Key	40mm	1NC	IP66	800F-1YM4	£33.60
Yellow plastic	Key	40mm	1NO-1NC	IP66	800F-1YM5	£35.90
Yellow plastic	Key	40mm	2NC	IP66	800F-1YM6	£35.90
Grey aluminium	Turn	40mm	1NC	IP66	800F-1MM1	£38.00
Grey aluminium	Turn	40mm	1NO-1NC	IP66	800F-1MM2	£40.20
Grey aluminium	Turn	40mm	2NC	IP66	800F-1MM3	£40.20
Grey aluminium	Key	40mm	1NC	IP66	800F-1MM4	£47.60
Grey aluminium	Key	40mm	1NO-1NC	IP66	800F-1MM5	£49.90
Grey aluminium	Key	40mm	2NC	IP66	800F-1MM6	£49.90

Signals and Sounders

This is a modular system of visual and audible alarm and signalling devices covering virtually all industrial requirements. The robust, snap-together stacking beacons can easily be built into customised assemblies on-site. Connection can be hard-wired or via the proven DeviceNet network. Separate or combined sound and light units help save space without compromising on the quality or safety of the installation.

Features and benefits:

- Variety of light sources facilitate exact matching to the application
- Combined units reduce cost and space requirements
- Wide choice of sound/light outputs permits clear differentiation



Panel-mount Sounder



Fixing	Volume	Dia.	Voltage	Tone Selection	Product Code	Price
22.5mm	80dB	30mm	24V AC/DC	Steady/pulse	855P-B30SE22	£21.90
22.5mm	80dB	30mm	120V AC	Steady/pulse	855P-B10SE22	£21.90
22.5mm	80dB	30mm	240V AC	Steady/pulse	855P-B20SE22	£21.90
22.5mm	100dB	45mm	24V AC/DC	Steady/pulse	855P-B30ME22	£37.20
22.5mm	100dB	45mm	120V AC	Steady/pulse	855P-B10ME22	£37.20
22.5mm	100dB	45mm	240V AC	Steady/pulse	855P-B20ME22	£37.20
22.5mm	105dB	65mm	24V AC/DC	Steady/pulse/wobble	855P-B30LE22	£54.10
22.5mm	105dB	65mm	120V AC	Steady/pulse/wobble	855P-B10LE22	£54.10
22.5mm	105dB	65mm	240V AC	Steady/pulse/wobble	855P-B20LE22	£54.10

Panel-mount Sounder with Red LED



Fixing	Volume	Dia.	Voltage	Tone Selection	Product Code	Price
22.5mm	93dB	45mm	24V AC/DC	Steady/pulse	855PC-B24ME422	£49.10
22.5mm	93dB	45mm	120V AC	Steady/pulse	855PC-B10ME422	£49.10
22.5mm	93dB	45mm	240V AC	Steady/pulse	855PC-B20ME422	£49.10
22.5mm	103dB	65mm	24V AC/DC	Steady/pulse/wobble	855PC-B24LE422	£62.30
22.5mm	103dB	65mm	120V AC	Steady/pulse/wobble	855PC-B10LE422	£62.30
22.5mm	103dB	65mm	240V AC	Steady/pulse/wobble	855PC-B20LE422	£62.30

Panel-mount Red LED



Fixing	Dia.	Voltage	Light Selection	Product Code	Price
22.5mm	45mm	24V AC/DC	Steady/flash	855PB-B24ME422	£44.60
22.5mm	65mm	24V AC/DC	Steady/flash	855PB-B24LE422	£50.10

Panel-mount Red Strobe



Fixing	Dia.	Voltage	Light Selection	Product Code	Price
22.5mm	45mm	24V AC/DC	Strobe	855PS-B30ME422	£47.40
22.5mm	65mm	24V AC/DC	Strobe	855PS-B30LE422	£50.60

Sounders • Beacons

Tower Light Modules



Voltage	Lens Colour	Light Type	IP Rating	Product Code	Price
24V AC/DC	Green	Steady	IP65	855T-B24DN3	£28.40
24V AC/DC	Red	Steady	IP65	855T-B24DN4	£28.40
24V AC/DC	Amber	Steady	IP65	855T-B24DN5	£28.40
110V AC	Green	Steady	IP65	855T-B10DN3	£28.40
110V AC	Red	Steady	IP65	855T-B10DN4	£28.40
110V AC	Amber	Steady	IP65	855T-B10DN5	£28.40
24V AC/DC	Green	Steady LED	IP65	855T-B24TL3	£64.60
24V AC/DC	Red	Steady LED	IP65	855T-B24TL4	£64.60
24V AC/DC	Amber	Steady LED	IP65	855T-B24TL5	£64.60
110V AC	Green	Steady LED	IP65	855T-B10TL3	£64.60
110V AC	Red	Steady LED	IP65	855T-B10TL4	£64.60
110V AC	Amber	Steady LED	IP65	855T-B10TL5	£64.60
24V AC/DC	Green	Flashing	IP65	855T-B24FN3	£61.80
24V AC/DC	Red	Flashing	IP65	855T-B24FN4	£61.80
24V AC/DC	Amber	Flashing	IP65	855T-B24FN5	£61.80
110V AC	Green	Flashing	IP65	855T-B10FN3	£61.80
110V AC	Red	Flashing	IP65	855T-B10FN4	£61.80
110V AC	Amber	Flashing	IP65	855T-B10FN5	£61.80
24V AC/DC	Green	Strobe	IP65	855T-B24BR3	£118.00
24V AC/DC	Red	Strobe	IP65	855T-B24BR4	£118.00
24V AC/DC	Amber	Strobe	IP65	855T-B24BR5	£118.00
110V AC	Green	Strobe	IP65	855T-B10BR3	£118.00
110V AC	Red	Strobe	IP65	855T-B10BR4	£118.00
110V AC	Amber	Strobe	IP65	855T-B10BR5	£118.00

Tower Lights

Tower Light/Sound Modules



Voltage	Lens Colour	Light Type	Volume	Tone Selection	Product Code	Price
24V AC/DC	Red	Steady	92...107dB	Steady/pulse	855T-B24DC4	£73.20
24V AC/DC	Amber	Steady	92...107dB	Steady/pulse	855T-B24DC5	£73.20
110V AC	Red	Steady	92...107dB	Steady/pulse	855T-B10DC4	£73.20
110V AC	Amber	Steady	92...107dB	Steady/pulse	855T-B10DC5	£73.20
24V AC/DC	Red	Flashing	92...107dB	Steady/pulse	855T-B24FC4	£103.00
24V AC/DC	Amber	Flashing	92...107dB	Steady/pulse	855T-B24FC5	£103.00
110V AC	Red	Flashing	92...107dB	Steady/pulse	855T-B10FC4	£103.00
110V AC	Amber	Flashing	92...107dB	Steady/pulse	855T-B10FC5	£103.00

Tower Sound Modules



Voltage	Volume	Tone Selection	Sounder Type	IP Rating	Product Code	Price
24V AC/DC	80...103dB	1...13 tones	Single-tone	IP54	855T-B24SA1	£107.00
110V AC	80...103dB	1...13 tones	Single-tone	IP54	855T-B10SA1	£107.00
24V AC/DC	80...103dB	1...15 combinations	Dual-tone	IP54	855T-B24TA1	£117.00
110V AC	80...103dB	1...15 combinations	Dual-tone	IP54	855T-B10TA1	£117.00

Tower Bases with Cap



Mounting	Insulated Pole	Product Code	Price
Wall-mount	None	855T-BVMC	£31.40
Surface	None	855T-BRBC	£24.70
Surface	10cm	855T-BPM10C	£38.40
Surface	25cm	855T-BPM25C	£44.60
Surface	40cm	855T-BPM40C	£51.20

Power Supplies

Allen-Bradley power supplies offer enhanced performance and significantly reduced panel footprint, the compact units often being 50% smaller than most comparable devices. Typical efficiency across the entire family of Power Supplies is 85...90%, resulting in minimal heat generation yet retaining excellent peak-load characteristics. The 1606-XLS units are suitable for use in high integrity applications, as they comply with the exacting "Semi-F47" specification for mains-dip ride-through.



Features and benefits:

- Spring clamp terminals offer rapid, vibration-resistant connection
- DIN-rail mounting facilitates convenient, quick assembly
- High efficiency design provides consistent output and low heat generation

Essential Power Supplies



Output A	Output V	Input V	Product Code	Price
5A	24V DC	85...264V AC, 1-phase	1606-XLE120E	£115.00
5A	24V DC	240V AC, 1-phase	1606-XLE120EE	£101.00
10A	24V DC	85...264V AC, 1-phase	1606-XLE240E	£167.00
10A	24V DC	240V AC, 1-phase	1606-XLE240EE	£146.00

Compact Power Supplies



Output A	Output V	Input V	Product Code	Price
3A	5V DC	85...264V AC, 1-phase	1606-XLP15A	£46.50
5A	5V DC	85...264V AC, 1-phase	1606-XLP25A	£83.20
1.3A	12V DC	85...264V AC, 1-phase	1606-XLP15B	£46.50
3A	12V DC	85...264V AC, 1-phase	1606-XLP30B	£84.10
4.2A	12V DC	85...264V AC, 1-phase	1606-XLP50B	£100.00
0.6A	24V DC	85...264V AC, 1-phase	1606-XLP15E	£33.50
1.3A	24V DC	85...264V AC, 1-phase	1606-XLP30E	£69.30
2.1A	24V DC	85...264V AC, 1-phase	1606-XLP50E	£84.50
3A	24V DC	85...264V AC, 1-phase	1606-XLP72E	£101.00
4.2A	24V DC	85...264V AC, 1-phase	1606-XLP100E	£115.00

Compact Performance Power Supplies



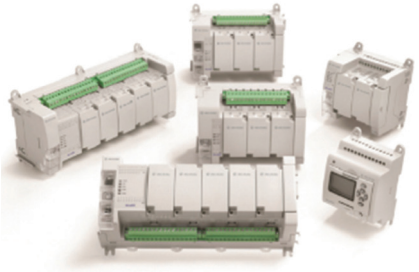
Output A	Output V	Input V	Product Code	Price
5A	24V DC	85...264V AC, 1-phase	1606-XLS120E	£164.00
10A	24V DC	85...264V AC, 1-phase	1606-XLS240E	£238.00
20A	24V DC	415V AC, 3-phase	1606-XLS480E-3	£303.00
40A	24V DC	85...264V AC, 1-phase	1606-XLS960EE	£345.00
40A	24V DC	415V AC, 3-phase	1606-XLS960E-3	£354.00

Programmable Logic Controllers

The Micro800 range of PLCs sets new standards of power and versatility in the world of MicroPLCs. Through its unique plug-in features, the controllers can be customised to exactly match your requirements so you can get 'just enough control' for your application. Along with the free-of-charge Connected Components Workbench programming software, Micro800 PLCs offer a size, price and performance combination which is hard to match.

Features & Benefits:

- Plug-in options offer true versatility within a fixed footprint
- Fast processing time allows use in high-speed applications
- Familiar IEC1131 programming environment minimises training and reduces time to market



Micro810



Supply	DI	Relay DO	Max Plug-Ins	Product Code	Price
110/240V AC	8 x 110/240V AC	4 -	-	2080-LC10-12AWA	£69.30
24V DC	8 x 24V DC	4 -	4	2080-LC10-12QWB	£69.30
12/24V DC	8 x 24V DC	- 4 x 24V DC	4	2080-LC10-12QBB	£69.30
12V DC	8 x 12V DC	4 -	4	2080-LC10-12DWD	£69.30

Micro810 Accessories



Description	Product Code	Price
Plug-in 1.5" LCD display with keypad and memory back-up	2080-LCD	£24.50
Plug-in USB port (programming with CCW software)	2080-USBADAPTER	£16.40

Micro820



Supply	DI	Relay DO	Max Plug-Ins	Product Code	Price
24V DC	12 x 24V DC	7 -	2	2080-LC20-20QWB	£213.00
24V DC	12 x 24V DC	- 7 x 24V DC	2	2080-LC20-20QBB	£213.00
8 x 120V AC	4 x 24V DC	7 -	2	2080-LC20-20AWB	£213.00
LCD Display and Keypad				2080-REMLCD	£121.00

Micro830



Supply	DI	Relay DO	Max Plug-Ins	Product Code	Price
24V DC	6 x 24V DC (4 fast)	4 -	2	2080-LC30-10QWB	£148.00
24V DC	10 x 110V AC	6 -	2	2080-LC30-16AWB	£198.00
24V DC	10 x 24V DC (4 fast)	6 -	2	2080-LC30-16QWB	£198.00
24V DC	14 x 24V DC (8 fast)	- 10 x 24V DC	3	2080-LC30-24QBB	£256.00
		(2 fast)			
24V DC	14 x 24V DC (8 fast)	10 -	3	2080-LC30-24QWB	£256.00
24V DC	28 x 110V AC	20 -	5	2080-LC30-48AWB	£404.00
24V DC	28 x 24V DC (12 fast)	- 20 x 24V DC	5	2080-LC30-48QBB	£404.00
		(4 fast)			
24V DC	28 x 24V DC (12 fast)	20 -	5	2080-LC30-48QWB	£404.00

Micro850 - With EtherNet/IP Communications



Supply	DI	Relay	DO	Max Plug-Ins	Product Code	Price
24V DC	14 x 110V AC	10	-	3	2080-LC50-24AWB	£375.00
24V DC	14 x 24V DC (8 fast)	-	10 x 24V DC 3 (2 fast)	3	2080-LC50-24QBB	£375.00
24V DC	14 x 24V DC (8 fast)	10	-	3	2080-LC50-24QWB	£375.00
24V DC	28 x 110V AC	20	-	5	2080-LC50-48AWB	£549.00
24V DC	28 x 24V DC (12 fast)	-	20 x 24V DC 5 (4 fast)	5	2080-LC50-48QBB	£549.00
24V DC	28 x 24V DC (12 fast)	20	-	5	2080-LC50-48QWB	£549.00

Micro850 I/O Expansion Modules



DI	Relay	DO	AI	AO	Product Code	Price
8 x 120V AC	-	-	-	-	2085-IA8	£89.70
8 x 240V AC	-	-	-	-	2085-IM8	£89.70
16 x 12/24V AC	-	-	-	-	2085-IQ16	£114.00
32 x 12/24V DC	-	-	-	-	2085-IQ32T	£187.00
-	-	8 x 110/240 AC	-	-	2085-OA8	£114.00
-	-	16 x 12/24V DC	-	-	2085-OB16	£143.00
-	8	-	-	-	2085-OW8	£93.70
-	16	-	-	-	2085-OW16	£139.00
-	-	-	4 x 14 bit	-	2085-IF4	£179.00
-	-	-	8 x 14 bit	-	2085-IF8	£310.00
-	-	-	-	4 x 12 bit	2085-OF4	£179.00

Micro850 Additional Expansion Modules



Description	Product Code	Price
Temperature input - 4 channel RTD and TC (isolated) input	2085-IRT4	£277.00
Bus terminator for use with 2085 expansion modules	2085-ECR	£12.20

Micro830/850 Plug-In I/O Expansion Modules



DI	Relay	DO	AI	AO	Product Code	Price
4 x 24V DC	-	-	-	-	2080-IQ4	£40.00
4 x 24V DC	-	4 x 24V DC	-	-	2080-IQ4OB4	£64.30
-	-	4 x 24V DC	-	-	2080-OB4	£40.00
-	4	-	-	-	2080-OW4I	£56.30
-	-	-	4 x 12 bit	-	2080-IF4	£121.00
-	-	-	2 x 12 bit	-	2080-IF2	£72.50
-	-	-	-	2 x 12 bit	2080-OF2	£72.50

Micro830/850 Plug-In Modules



Description	Product Code	Price
Serial port (isolated) RS232/485	2080-SERIALISOL	£56.30
User memory (project, data log, backup etc) and real-time clock	2080-MEMBAK-RTC	£80.60
Temperature input - 2 channel RTD (non-isolated)	2080-RTD2	£88.70
Temperature input - 2 channel thermocouple (non-isolated)	2080-TC2	£88.70

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Description	Product Code	Price
Trim pot - 6 channel, analogue dials	2080-TRIMPOT6	£80.60
High speed counter module	2080-MOTHSC	£80.60
20-node device net scanner	2080-DNET20	£121.00

Micro830/850 Additional Plug-In Modules

Description	Supplier	Product Code	Price
Universal 4-channel analogue (voltage/current/temp)	Spectrum Controls	SP2080SC-IF4U	£131.79
High-current relay output (2 x 10A)	Spectrum Controls	SP2080SC-OW2IHC	£62.11
4-channel thermistor input	Spectrum Controls	SP2080SC-NTC	£144.96
BACNet communications plug-in module	Spectrum Controls	SP2080SC-BAC	£131.79
Easy 8 Micro 800 weigh scale module	Hardy	HARHI2080-WS	£337.49



Micro800 Accessories

Description	Product Code	Price
Power supply 110...240V AC to 24V DC (1.6A)	2080-PS120-240VAC	£39.20
Stratix 2000, 5 port unmanaged switch	1783-US5T	£71.30
Stratix 2000 Switch, Unmanaged, 8 Copper Ports	1783-US8T	£98.40
Male RJ45 to Male RJ45 Patchcord, Unshielded Twisted Pair, Teal TPE	158J-M8TBJM-1M9	£20.90
Cable 1.9		



Micro800 Software- Connected Components Workbench

Description	Product Code	Price
Standard edition (download available)	ab.com/go/micro800	£FOC
Developer edition (download available)	9328-CCWDEVENE	£226.00



MicroLogix 1100 - With EtherNet/IP Communications

Input	DI	Relay	DO	AI	Comms	Product Code	Price
85...264V AC	10 x 110V AC	6	-	2	2	1763-L16AWA	£424.00
85...264V AC	10 x 24V DC (4 fast)	6	-	2	2	1763-L16BWA	£424.00
24V DC	10 x 24V DC (4 fast)	2	4 x 24V DC (2 fast)	2	2	1763-L16BBB	£424.00
12...24V DC	10 x 12...24V DC (4 fast)	6	-	2	2	1763-L16DWD	£424.00



MicroLogix 1100 Memory Modules

Description	Product Code	Price
Plug-in memory - data/user program	1763-MM1	£125.00



MicroLogix 1400 - With EtherNet/IP Communications

Input	DI	Relay	DO	AI	AO	Comms	Product Code	Price
85...264V AC	20 x 110V AC	12	-	-	-	3	1766-L32AWA	£555.00
85...264V AC	20 x 24V DC (12 fast)	12	-	-	-	3	1766-L32BWA	£555.00
24V DC	20 x 24V DC (12 fast)	6	6 x 24V DC (3 fast)	-	-	3	1766-L32BXB	£555.00



Continued on next page

11 • Programmable Logic Controllers

MicroLogix 1100 & 1400 • MicroLogix Interface Modules • MicroLogix 1100 & 1400 • MicroLogix Software

Input	DI	Relay	DO	AI	AO	Comms	Product Code	Price
85...264V AC	20 x 24V DC (12 fast)	12	-	4	2	3	1766-L32BWAA	£694.00
24V DC	20 x 24V DC (12 fast)	6	6 x 24V DC (3 fast)	4	2	3	1766-L32BXBA	£694.00

MicroLogix 1400 - Accessories



Description	Product Code	Price
Plug-in memory - data/user program	1766-MM1	£134.00
Replacement lithium battery (for MLX 1400/1500)	1747-BA	£82.60

MicroLogix 1100 & 1400 Expansion Modules



DI	Relay	DO	AI	AO	Therm	Product Code	Price
8 x 110V AC	-	-	-	-	-	1762-IA8	£118.00
8 x 24V DC	-	-	-	-	-	1762-IQ8	£116.00
16 x 24V DC	-	-	-	-	-	1762-IQ16	£146.00
-	-	8 x 24V DC	-	-	-	1762-OB8	£124.00
-	-	16 x 24V DC	-	-	-	1762-OB16	£177.00
-	8	-	-	-	-	1762-OW8	£124.00
-	16	-	-	-	-	1762-OW16	£177.00
-	-	-	4	-	-	1762-IF4	£245.00
-	-	-	-	4	-	1762-OF4	£230.00
-	-	-	2	2	-	1762-IF2OF2	£245.00
-	-	-	-	-	4	1762-IT4	£341.00

MicroLogix Interface Modules



Description	Connections	Product Code	Price
RS232 module	8-pin miniDIN and 9-pin D-shell	1761-NET-AIC	£211.00
EtherNet/IP & RS232 module	RJ45 and 8-pin miniDIN	1761-NET-ENI	£728.00
EtherNet/IP with web server module	RJ45 and 8-pin miniDIN	1761-NET-ENIW	£959.00
0.5m communication cable	8-pin miniDIN to 8-pin miniDIN	1761-CBL-AM00	£32.00
2.0m communication cable	8-pin miniDIN to 8-pin miniDIN	1761-CBL-HM02	£51.00
5.0m communication cable	8-pin miniDIN to 8-pin miniDIN	2711-CBL-HM05	£94.00
10m communication cable	8-pin miniDIN to 8-pin miniDIN	2711-CBL-HM10	£106.00
3.0m communication cable	9-pin D-shell to 9-pin D-shell	1747-CP3	£71.70
0.5m communication cable	8-pin miniDIN to 9-pin D-shell	1761-CBL-AP00	£32.00
0.5m communication cable	9-pin D-shell to 9-pin D-shell	1761-CBL-AC00	£33.80
2.0m communication cable	8-pin miniDIN to 9-pin D-shell	1761-CBL-PM02	£50.20
5.0m communication cable	8-pin miniDIN to 9-pin D-shell	2711-CBL-PM05	£94.00
10m communication cable	8-pin miniDIN to 9-pin D-shell	2711-CBL-PM10	£106.00
3.0m communication cable	6-pin Phoenix to RJ45 (DH485)	1761-CBL-AS03	£54.90
9.0m communication cable	6-pin Phoenix to RJ45 (DH485)	1761-CBL-AS09	£69.00
Interface converter	USB to DH485	1747-UIC	£254.00

MicroLogix Programming Software



Description	Product Code	Price
RSLogix Micro Starter	9324-RLM0100ENE	£83.80
RSLogix Micro Developer	9324-RLM0800ENE	£312.00

Operator Interface

These compact Operator Interfaces have been developed to work perfectly with the Allen-Bradley Micro800 & MicroLogix PLCs. With the user software already loaded on each terminal, programming is simply achieved via the USB or Ethernet ports using standard web-browsers; it's as easy as that. Built-in multi-vendor communication will support most existing standards and all major world languages are available, including those using Cyrillic texts.



Features and benefits:

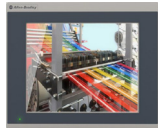
- Built-in software or configure via Connected Components Workbench
- Vast language choice facilitates world-wide use for exporters
- RS-232 and RS-422/485 on all models enables straight forward communication

PanelView Component



Input	Screen	Operator Input	Comms	Product Code	Price
18...30V DC	2" mono	Function keys	USB	2711C-F2M	£175.00
18...30V DC	2" mono	Function and numeric	USB	2711C-K2M	£213.00
18...30V DC	3" mono	Touch screen	USB	2711C-T3M	£239.00
18...30V DC	3" mono	Function and numeric	USB	2711C-K3M	£298.00

PanelView Component 800



Input	Screen	Operator Input	Comms	Product Code	Price
18...30V DC	4.3" colour	Touch and keys	Ethernet	2711R-T4T	£309.00
18...30V DC	7" colour	Touch screen	Ethernet	2711R-T7T	£531.00
18...30V DC	10" colour	Touch screen	Ethernet, USB	2711C-T6T	£534.00

PanelView Component Accessories



Type	Cable Length	Product Code	Price
Operating cable	2m	1761-CBL-PM02	£50.20
Operating cable	5m	2711-CBL-PM05	£94.00
Operating cable	10m	2711-CBL-PM10	£106.00
Cable: MicroLogix 1000 Controller To Port	N/A	1761-CBL-AP00	£32.00
USB host to USB device programming cable	2m	2711C-CBL-UU02	£17.20
7in Adapter Plate Kit	N/A	2711R-APK7	£70.60
10in Adapter Plate Kit	N/A	2711R-APK10	£84.40

Soft Starters

Not to be confused with cheaper, two-phase controllers, these are true three-phase devices with built-in bypass contactors and as such, represent the smallest, smartest devices on the market. With integrated overload protection, current limit and multiple starting and stopping options throughout the range. SMC devices continue to prove their worth in a variety of harsh industrial applications, including conveying, materials handling, pumps and fans.

Features and benefits:

- Network option (SMC-Flex) allows connection into your Integrated Architecture
- Built-in bypass ensures low temperature and long-life
- Small panel footprint saves panel space - matches contactor/MPCB size



SMC-3 Soft Starters



Control	FLC - Line	kW - Line	FLC - Delta	kW - Delta	Fan	Product Code	Price
100...240V AC	1...3A	1.1	1.7...5.1A	0.5...2.2	Optional	150-C3NBD	£208.00
100...240V AC	3...9A	4	5.1...16A	2.2...7.5	Optional	150-C9NBD	£224.00
100...240V AC	5.3...16A	7.5	9.1...27.6A	4...11	Optional	150-C16NBD	£274.00
100...240V AC	6.3...19A	7.5	10.9...32.8A	4...15	Optional	150-C19NBD	£296.00
100...240V AC	9.2...27A	11	14.3...43A	5.5...22	Optional	150-C25NBD	£305.00
100...240V AC	10...30A	15	17.3...52A	7.5...22	Optional	150-C30NBD	£372.00
100...240V AC	12.3...37A	18.5	21...64A	7.5...30	Optional	150-C37NBD	£460.00
100...240V AC	14.3...43A	22	25...74A	11...37	Fitted	150-C43NBD	£584.00
100...240V AC	20...60A	30	34.6...104A	15...55	Fitted	150-C60NBD	£764.00
100...240V AC	28.3...85A	45	50...147A	22...75	Fitted	150-C85NBD	£997.00
100...240V AC	27...108A	55	47...187A	90	Fitted	150-C108NBD	£1350.00
100...240V AC	34...135A	75	59...234A	132	Fitted	150-C135NBD	£1630.00

24V AC/DC	1...3A	1.1	1.7...5.1A	0.5...2.2	Optional	150-C3NBR	£208.00
24V AC/DC	3...9A	4	5.1...16A	2.2...7.5	Optional	150-C9NBR	£224.00
24V AC/DC	5.3...16A	7.5	9.1...27.6A	4...11	Optional	150-C16NBR	£274.00
24V AC/DC	6.3...19A	7.5	10.9...32.8A	4...15	Optional	150-C19NBR	£296.00
24V AC/DC	9.2...27A	11	14.3...43A	5.5...22	Optional	150-C25NBR	£305.00
24V AC/DC	10...30A	15	17.3...52A	7.5...22	Optional	150-C30NBR	£372.00
24V AC/DC	12.3...37A	18.5	21...64A	7.5...30	Optional	150-C37NBR	£460.00
24V AC/DC	14.3...43A	22	25...74A	11...37	Fitted	150-C43NBR	£584.00
24V AC/DC	20...60A	30	34.6...104A	15...55	Fitted	150-C60NBR	£764.00
24V AC/DC	28.3...85A	45	50...147A	22...75	Fitted	150-C85NBR	£997.00
24V AC/DC	27...108A	55	47...187A	90	Fitted	150-C108NBR	£1350.00
24V AC/DC	34...135A	75	59...234A	132	Fitted	150-C135NBR	£1630.00

Auxillary Contacts



Contacts	Product Code	Price
1NO	150-CA10	£16.00
2NO	150-CA20	£21.80
1NO-1NC	150-CA11	£21.80

Optional Fan



For Use With	Product Code	Price
150-C3...C37	150-CF64	£28.60

SMC-Flex Soft Starters



Control	FLC - Line	kW - Line	FLC - Delta	kW - Delta	Fan	Product Code	Price
100...240V AC	5...25A	11	8.7...43A	22	Fitted	150-F25NBD	£936.00
100...240V AC	8.6...43A	22	25...74A	37	Fitted	150-F43NBD	£987.00
100...240V AC	12...60A	30	34.6...104A	55	Fitted	150-F60NBD	£1100.00
100...240V AC	17...85A	45	50...147A	75	Fitted	150-F85NBD	£1180.00
100...240V AC	27...108A	55	47...187A	90	Fitted	150-F108NBD	£1550.00
100...240V AC	34...135A	75	59...234A	132	Fitted	150-F135NBD	£2090.00
100...240V AC	67...201A	110	116...348A	160	Fitted	150-F201NBD	£2330.00
100...240V AC	84...251A	132	145...435A	250	Fitted	150-F251NBD	£2570.00
100...240V AC	106...317A	160	183...549A	315	Fitted	150-F317NBD	£2710.00
100...240V AC	120...361A	200	208...625A	355	Fitted	150-F361NBD	£2920.00
100...240V AC	160...480A	250	277...831A	450	Fitted	150-F480NBD	£4090.00

Human Interface Modules



Type	LCD	Cable Inc	Product Code	Price
Hand-held	Full numeric	No	20-HIM-A3	£118.00
Hand-held	Programmer only	No	20-HIM-A5	£157.00
Door-mount	Full keypad (IP66)	Yes	20-HIM-C3S	£185.00

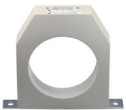
Interface cable - 1m	20-HIM-H10	£47.80
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Communication Modules



Type	Product Code	Price
DeviceNet	20-COMM-D	£224.00
ControlNet	20-COMM-C	£318.00
EtherNet/IP	20-COMM-E	£329.00
Profibus	20-COMM-P	£329.00

Core Balance Ground Fault Sensor



Ratio	Aperture	Product Code	Price
100:1	110mm	825-CBCT	£137.00

Terminal Covers



For Use With SMC-3	For Use With SMC-Flex	Product Code	Price
150-C108.....C135	150-F108.....F135	150-TC1	£24.70
150-C201.....C251	150-F201.....F251	150-TC2	£28.90
150-C317.....C480	150-F317.....F480	150-TC3	£32.80

Compact Drives

PowerFlex drives provide flexibility in a compact industrial format. The PowerFlex 4M is designed for simple drive applications but if additional performance is required the PowerFlex 523 and 525 with Sensorless Vector Control are an excellent choice.

- These drives are highly featured and include:
- Embedded Ethernet/IP port (PowerFlex 525)
 - Option cards for DeviceNet, Profibus and dual port Ethernet/IP (PowerFlex 523/525)
 - Safe Torque-Off, SIL2/PLd (PowerFlex 525)



Single-phase Input Drives PF4M



kW	Input	Output	EMC Filter	Brake	Frame	Product Code	Price
0.25	200...240V AC	1.6A	Yes	No	A	22F-A1P6N113	£121.00
0.37	200...240V AC	2.5A	Yes	No	A	22F-A2P5N113	£133.00
0.75	200...240V AC	4.2A	Yes	No	A	22F-A4P2N113	£166.00
1.5	200...240V AC	8A	Yes	No	B	22F-A8P0N113	£218.00
2.2	200...240V AC	11A	Yes	No	B	22F-A011N113	£259.00

Three-phase Drives PF4M



kW	Input	Output	EMC Filter	Brake	Frame	Product Code	Price
0.37	400...480V AC	1.4A	Yes	No	A	22F-D1P5N113	£234.00
0.75	400...480V AC	2.5A	Yes	No	A	22F-D2P5N113	£268.00
1.5	400...480V AC	4.2A	Yes	No	A	22F-D4P2N113	£310.00
2.2	400...480V AC	6A	Yes	No	B	22F-D6P0N113	£376.00
4	400...480V AC	8.7A	Yes	No	B	22F-D8P7N113	£439.00
5.5	400...480V AC	13A	Yes	Yes	C	22F-D013N114	£572.00
7.5	400...480V AC	18A	Yes	Yes	C	22F-D018N114	£738.00
11	400...480V AC	24A	Yes	Yes	C	22F-D024N114	£925.00

External EMC Filters



Current	Drive	Motor Cable	Frame	Product Code	Price
10A	1-phase	Up to 100m	A	22F-RF010-AL	£30.90
5.7A	3-phase	Up to 100m	A	22F-RF6P0-AL	£36.50
12A	3-phase	Up to 100m	B	22F-RF012-BL	£50.40
26A	3-phase	Up to 100m	C	22F-RF026-CL	£92.90

Human Interface Modules



Display	Type	Protection	Cable	Product Code	Price
LCD	Panel-mount	IP66	2.9m	22-HIM-C2S	£155.00
LCD	Hand-held	IP30	1m	22-HIM-A3	£96.50

Human Interface Module Accessories



Description	Cable	Product Code	Price
Bezel kit for hand-held HIM module	2m	22-HIM-B1	£38.00
Cable - HIM to RJ45	2.9m	22-HIM-H30	£14.60

Dynamic Brake Resistors



Voltage	Resistance	Watts	Duty	Product Code	Price
200...480V AC	120Ω	260	5%	AK-R2-120P1K2	£171.00

Single-phase Input Drives PF523



kW	Input	Output	EMC Filter	Brake	Frame	Product Code	Price
0.25	200...240V AC	1.6A	Yes	Yes	A	25A-A1P6N114	£165.00
0.37	200...240V AC	2.5A	Yes	Yes	A	25A-A2P5N114	£176.00
0.75	200...240V AC	4.8A	Yes	Yes	A	25A-A4P8N114	£228.00
1.5	200...240V AC	8.0A	Yes	Yes	B	25A-A8P0N114	£317.00
2.2	200...240V AC	11A	Yes	Yes	B	25A-A011N114	£364.00

Three-phase Drives PF523



kW	Input	Output	EMC Filter	Brake	Frame	Product Code	Price
0.37	400...480V AC	1.4A	Yes	Yes	A	25A-D1P4N114	£305.00
0.75	400...480V AC	2.3A	Yes	Yes	A	25A-D2P3N114	£343.00
1.5	400...480V AC	4A	Yes	Yes	A	25A-D4P0N114	£390.00
2.2	400...480V AC	6A	Yes	Yes	A	25A-D6P0N114	£464.00
4	400...480V AC	10A	Yes	Yes	B	25A-D010N114	£571.00
5.5	400...480V AC	13A	Yes	Yes	C	25A-D013N114	£740.00
7.5	400...480V AC	17A	Yes	Yes	C	25A-D017N114	£890.00
11	400...480V AC	24A	Yes	Yes	D	25A-D024N114	£1100.00

Single-phase Input Drives PF525



kW	Input	Output	EMC Filter	Brake	Frame	Product Code	Price
0.37	200...240V AC	2.5A	Yes	Yes	A	25B-A2P5N114	£265.00
0.75	200...240V AC	4.8A	Yes	Yes	A	25B-A4P8N114	£318.00
1.5	200...240V AC	8.0A	Yes	Yes	B	25B-A8P0N114	£402.00
2.2	200...240V AC	11A	Yes	Yes	B	25B-A011N114	£477.00

Three-phase Drives PF525



kW	Input	Output	EMC Filter	Brake	Frame	Product Code	Price
0.37	400...480V AC	1.4A	Yes	Yes	A	25B-D1P4N114	£442.00
0.75	400...480V AC	2.3A	Yes	Yes	A	25B-D2P3N114	£448.00
1.5	400...480V AC	4A	Yes	Yes	A	25B-D4P0N114	£510.00
2.2	400...480V AC	6A	Yes	Yes	A	25B-D6P0N114	£605.00

PowerFlex 4M • PowerFlex 523 • PowerFlex 525

Continued on next page

kW	Input	Output	EMC Filter	Brake	Frame	Product Code	Price
4	400...480V AC	10A	Yes	Yes	B	25B-D010N114	£747.00
5.5	400...480V AC	13A	Yes	Yes	C	25B-D013N114	£871.00
7.5	400...480V AC	17A	Yes	Yes	C	25B-D017N114	£1040.00
11	400...480V AC	24A	Yes	Yes	D	25B-D024N114	£1240.00
15	400...480V AC	30A	Yes	Yes	D	25B-D030N114	£1490.00
18.5	400...480V AC	37A	Yes	Yes	E	25B-D037N114	£1830.00
22	400...480V AC	43A	Yes	Yes	E	25B-D043N114	£2340.00

Communication Option Kits



Description	Product Code	Price
DeviceNet Communication adaptor	25-COMM-D	£145.00
EtherNet/IP Communication adaptor - Dual Port	25-COMM-E2P	£181.00
Profibus PD Communication adaptor	25-COMM-P	£159.00

External EMC filters (for motor cables exceeding 20M)



Current	Drive	Motor Cable	Frame	Product Code	Price
11	1-phase	up to 100M	A	25-RF011-AL	£33.30
23	1-phase	up to 100M	B	25-RF023-BL	£47.40
7.5	3-phase	up to 100M	A	25-RF7P5-AL	£45.20
14	3-phase	up to 100M	B	25-RF014-BL	£58.70
18	3-phase	up to 100M	C	25-RF018-CL	£81.90
33	3-phase	up to 100M	D	25-RF033-DL	£104.00
39	3-phase	up to 100M	E	25-RF039-EL	£266.00

IP30, NEMA/UL Type 1 Conversion Kit



Description	Frame	Product Code	Price
Converts IP20 drive to IP30, NEMA/UL Type 1 enclosure	A	25-JBAA	£13.00
Converts IP20 drive to IP30, NEMA/UL Type 1 enclosure	B	25-JBAB	£14.10
Converts IP20 drive to IP30, NEMA/UL Type 1 enclosure	C	25-JBAC	£16.40
Converts IP20 drive to IP30, NEMA/UL Type 1 enclosure	D	25-JBAD	£20.00
Converts IP20 drive to IP30, NEMA/UL Type 1 enclosure	E	25-JBAE	£26.40

Dynamic Brake Resistors



Voltage	Drive	kW	Resistance	Watts	Duty	Product Code	Price
200...240V AC	1-phase	1.5	91Ω	86	5%	AK-R2-091P500	£122.00
200...240V AC	1-phase	2.2	47Ω	166	5%	AK-R2-047P500	£122.00
400...480V AC	3-phase	1.5	360Ω	86	5%	AK-R2-360P500	£122.00
400...480V AC	3-phase	7.5	120Ω	260	5%	AK-R2-120P1K2	£171.00

High Performance Drives

PowerFlex 753 drives combine power and flexibility with ratings up to 250kW. A wide range of network options are available including Ethernet/IP and DeviceNet.

Features and benefits:

- Configuration can be through an optional HIM or via free drive programming PC software.
- Safe Torque-Off and Safe Speed monitoring may also be added.

PowerFlex 753



kW	Input	Output	EMC Filter	Brake	Frame	Product Code	Price
0.75	400...480V	2.1	Yes	Yes	2	20F11NC2P1JA0NNNNNN	£804.00
1.5	400...480V	3.5	Yes	Yes	2	20F11NC3P5JA0NNNNNN	£804.00
2.2	400...480V	5	Yes	Yes	2	20F11NC5P0JA0NNNNNN	£804.00
4	400...480V	8.7	Yes	Yes	2	20F11NC8P7JA0NNNNNN	£899.00
5.5	400...480V	11.5	Yes	Yes	2	20F11NC011JA0NNNNNN	£1090.00
7.5	400...480V	15	Yes	Yes	2	20F11NC015JA0NNNNNN	£1120.00
11	400...480V	22	Yes	Yes	2	20F11NC022JA0NNNNNN	£1360.00
15	400...480V	30	Yes	Yes	3	20F11NC030JA0NNNNNN	£1650.00
18.5	400...480V	37	Yes	Yes	3	20F11NC037JA0NNNNNN	£2060.00
22	400...480V	43	Yes	Yes	3	20F11NC043JA0NNNNNN	£2580.00
30	400...480V	60	Yes	Yes	4	20F11NC060JA0NNNNNN	£3070.00
37	400...480V	72	Yes	Yes	4	20F11NC072JA0NNNNNN	£3870.00
45	400...480V	85	Yes	Yes	5	20F11NC085JA0NNNNNN	£4650.00
55	400...480V	104	Yes	Yes	5	20F11NC104JA0NNNNNN	£5390.00
75	400...480V	140	Yes	Yes	6	20F1ANC140JN0NNNNNN	£5880.00
90	400...480V	170	Yes	No	6	20F1ANC170JN0NNNNNN	£6550.00
110	400...480V	205	Yes	No	6	20F1ANC205JN0NNNNNN	£7540.00
132	400...480V	260	Yes	No	6	20F1ANC260JN0NNNNNN	£9820.00
160	400...480V	302	Yes	No	7	20F1ANC302JN0NNNNNN	£10800.00
200	400...480V	367	Yes	No	7	20F1ANC367JN0NNNNNN	£13200.00
250	400...480V	456	Yes	No	7	20F1ANC456JN0NNNNNN	£16000.00

PowerFlex 753

PowerFlex 753 Human Interface Module



Description	Product Code	Price
Human Interface Module (HIM). LCD full keypad	20-HIM-A6	£97.00

PowerFlex 753 Option Cards



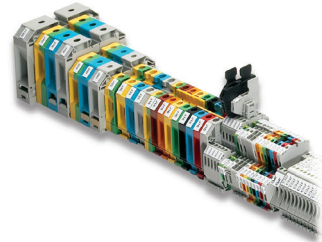
Description	Product Code	Price
Communications carrier card	20-750-20COMM	£31.50
DeviceNet Options Card. Comm. Carrier required	20-750-DNET	£194.00
Dual-port EtherNet/IP Kit. Comm. Carrier required	20-750-ENETR	£275.00
Safety module. Safe off	20-750-S	£68.50

Terminals

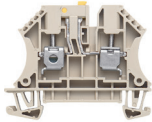
Allen-Bradley terminals from Rockwell Automation are constructed from durable, self-extinguishing polyamide material which offers excellent electrical and mechanical characteristics. The alloy bars have a high copper content providing excellent conductivity in the smallest possible housing. This catalogue shows the most commonly used screw-clamp terminals. For details of our extended range and IDC or spring-clamp variants, please enquire.

Features and benefits:

- World-wide approvals ensure customer acceptability and compliance
- Standardised dimensions simplify engineering and design
- Tapered terminal guides aid rapid, secure connection



Feed Through Terminals



Cable	Current	Width	Colour	Product Code	Price
2.5mm ²	24A	5.1mm	Grey	1492-J3	£0.63
4mm ²	32A	6.1mm	Grey	1492-J4	£0.70
6mm ²	41A	8.1mm	Grey	1492-J6	£0.97
10mm ²	57A	10mm	Grey	1492-J10	£1.16
16mm ²	76A	12mm	Grey	1492-J16	£1.45
35mm ²	125A	16mm	Grey	1492J-35	£3.03
50mm ²	150A	18.5mm	Grey	1492-J50	£6.77
70mm ²	192A	20.5mm	Grey	1492-J70	£11.00

End Plates/Partitions



Terminal	Colour	Type	Product Code	Price
2.5mm ² /4mm ² /6mm ² /10mm ²	Grey	End plate	1492-EBJ3	£0.33
2.5mm ² /4mm ²	Blue	End plate	1492-EBJ3-B	£0.36
2.5mm ² /4mm ² /6mm ² /10mm ² /16mm ² /35mm ²	Grey	End plate/partition	1492-EBJ16	£0.42
16mm ² /35mm ²	Grey	Partition	1492-PPJD3	£0.51

Cross Connections



Terminal	Pole	Product Code	Price
2.5mm ²	2	1492-CJJ5-2	£0.50
2.5mm ²	3	1492-CJJ5-3	£0.57
2.5mm ²	4	1492-CJJ5-4	£0.75
2.5mm ²	10	1492-CJJ5-10	£1.78
4mm ²	2	1492-CJJ6-2	£0.60
4mm ²	3	1492-CJJ6-3	£0.90
4mm ²	4	1492-CJJ6-4	£1.13

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Terminal	Pole	Product Code	Price
4mm ²	10	1492-CJJ6-10	£2.73
6mm ²	2	1492-CJJ8-2	£0.63
6mm ²	10	1492-CJJ8-10	£2.90
10mm ²	2	1492-CJJ10-2	£0.65
10mm ²	10	1492-CJJ10-10	£2.90
16mm ²	10	1492-CJJ12-10	£3.48
35mm ²	10	1492-CJJ16-10	£4.50

Earth Terminals



Cable	Width	Colour	Product Code	Price
2.5mm ²	5.1mm	Green/Yellow	1492-JG3	£2.00
4mm ²	6.1mm	Green/Yellow	1492-JG4	£2.05
6mm ²	8.1mm	Green/Yellow	1492-JG6	£2.38
10mm ²	10mm	Green/Yellow	1492-JG10	£2.58
16mm ²	12mm	Green/Yellow	1492-JG16	£3.56
35mm ²	16mm	Green/Yellow	1492-JG35	£4.77
50mm ²	18.5mm	Green/Yellow	1492-JG50	£13.00
70mm ²	20.5mm	Green/Yellow	1492-JG70	£17.10

End Plates



Terminal	Colour	Product Code	Price
2.5mm ²	Yellow	1492-EBJ3-Y	£0.36

Double Deck Terminals



Cable	Current	Width	Colour	Product Code	Price
2.5mm ²	24A	5.1mm	Grey	1492-JD3	£1.55
4mm ²	32A	6.1mm	Grey	1492-JD4	£1.52

Double Deck End Plate/ Partitions



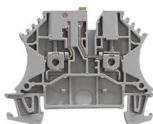
Terminal	Colour	Type	Product Code	Price
2.5mm ²	Grey	End Plate	1492-EBJD3	£0.53
4mm ²	Grey	End Plate	1492-EBJD4	£0.59
2.5mm ²	Grey	Partition	1492-PPJD3	£0.51

Double Deck Cross Connections



Terminal	Pole	Product Code	Price
2.5mm ²	2	1492-CJJ5-2	£0.50
2.5mm ²	3	1492-CJJ5-3	£0.57
2.5mm ²	4	1492-CJJ5-4	£0.75
2.5mm ²	10	1492-CJJ5-10	£1.78
4mm ²	2	1492-CJJ6-2	£0.60
4mm ²	3	1492-CJJ6-3	£0.90
4mm ²	4	1492-CJJ6-4	£1.13
4mm ²	10	1492-CJJ6-10	£2.73

Isolation Terminals



Cable	Current	Width	Colour	Product Code	Price
2.5mm ²	24A	5.1mm	Grey	1492-JKD3	£1.76

End Plates/Partitions



Terminal	Colour	Type	Product Code	Price
2.5mm ²	Grey	End plate	1492-EBJ3	£0.33
2.5mm ²	Grey	Partition	1492-PPJD3	£0.51

Cross Connections



Terminal	Pole	Product Code	Price
2.5mm ²	10	1492-CJLJ5-10	£1.89
2.5mm ²	50	1492-CJLJ5-50	£9.62

Fuse Terminals



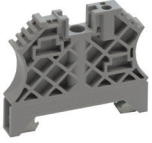
Cable	Current	Width	Colour	Fuse	Product Code	Price
4mm ²	12A	8mm	Black	5 x 20mm	1492-WFB4	£3.48

Mounting Rail



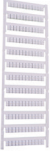
Rail	Type	Material	Finish	Length	Product Code	Price
TS35 x 7.5	Slotted	Steel	Zinc plated, yellow chrome	1m	199-DR1	£7.30

End Brackets



Type	Duty	Colour	Product Code	Price
End bracket	Normal	Grey	1492-EAJ35	£0.99
End bracket	Heavy	Grey	1492-EAHJ35	£1.64
End anchor	-	Grey	1492-ERL35	£0.38

Blank Markers



Size	Qty per Card	Cards per Pack	Product Code	Price
5 x 8mm	144	5	1492-M5X8	£7.51
5 x 10mm	144	5	1492-M5X10	£7.51
5 x 12mm	144	5	1492-M5X12	£7.60
6 x 10mm	120	5	1492-M6X10	£6.23
6 x 12mm	120	5	1492-M6X12	£6.33
7 x 12mm	108	5	1492-M7X12	£5.73

X-Y Plotter - Marking system



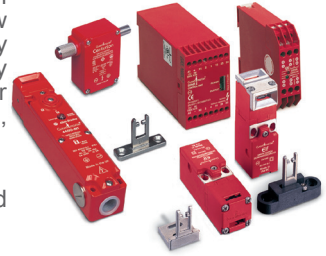
Description	Voltage	Product Code	Price
Plotter for customised terminal marking	220...240V AC	1492-PLTKIT	£2110.00
Disposable pen 0.25mm line		1492-PLOTPEN25	£29.60
Disposable pen 0.35mm line		1492-PLOTPEN35	£29.60
Refillable pen		1492-PLPEN	£63.60
Replacement cartridges (for 1492-PLPEN)		1492-PLINKCART	£4.54

Safety

Allen-Bradley Guardmaster comprises the largest range of safety products available anywhere in the world. With a hard-earned reputation for innovation and dependability they now occupy a position as “thought-leaders” in the integration of safety products and systems into industry. This selection represents only a small extract from the Allen-Bradley Guardmaster range. For other products, including safety PLCs, light curtains and scanners, please enquire.

Features and benefits:

- Detailed certification and test data supports your engineering and selection
- Common family design/colour ensures instant recognition as a safety device
- Comprehensive range allows exact matching to every safety requirement



Safety Relays - MSR126



- E-stop, safety gate or light curtain applications
- BS EN 954-1 Category 4
- Stop category: 0
- Cross-fault monitoring
- Fixed terminals
- 22.5mm wide housing

Voltage	Channel	Safety Input	Safety Output	Reset	Product Code	Price
24V AC/DC	1	1NC and light curtain	2NO	Auto/man	440R-N23117	£84.10
115V AC	1	1NC and light curtain	2NO	Auto/man	440R-N23116	£108.00
24V AC/DC	2	2NC	2NO	Auto/man	440R-N23114	£84.10
115V AC	2	2NC	2NO	Auto/man	440R-N23113	£108.00
24V AC/DC	1	1NC and light curtain	2NO	Mon/man	440R-N23123	£93.00
115V AC	1	1NC and light curtain	2NO	Mon/man	440R-N23122	£108.00
24V AC/DC	2	2NC	2NO	Mon/man	440R-N23120	£93.00
115V AC	2	2NC	2NO	Mon/man	440R-N23119	£108.00

Safety Relays - MSR127



- E-stop, safety gate or light curtain applications
- BS EN 954-1 Category 4
- Stop category: 0
- Cross-fault monitoring
- 22.5mm wide housing

Voltage	Safety Input	Safety Output	Aux Contact	Reset	Terminal	Product Code	Price
24V AC/DC	1NC, 2NC, 2PNP	3NO	1NC	Auto/man	Fixed	440R-N23126	£121.00
115V AC	1NC, 2NC, 2PNP	3NO	1NC	Auto/man	Fixed	440R-N23125	£149.00
24V AC/DC	1NC, 2NC, 2PNP	3NO	1NC	Mon/man	Fixed	440R-N23129	£134.00
115V AC	1NC, 2NC, 2PNP	3NO	1NC	Mon/man	Fixed	440R-N23128	£149.00
24V AC/DC	1NC, 2NC, 2PNP	3NO	1NC	Auto/man	Removable	440R-N23132	£130.00
115V AC	1NC, 2NC, 2PNP	3NO	1NC	Auto/man	Removable	440R-N23131	£151.00
24V AC/DC	1NC, 2NC, 2PNP	3NO	1NC	Mon/man	Removable	440R-N23135	£132.00
115V AC	1NC, 2NC, 2PNP	3NO	1NC	Mon/man	Removable	440R-N23134	£161.00

Safety Relays - GSR



- Broad range of safety functions and inputs
- Simple logic, reset and timing configurations
- Meets EN/ISO13849-1 or EN/IEC 62061
- Easy and flexible single wire relay connection

Voltage	Channel	Safety Output	Aux Contact	Model	Product Code	Price
24V DC	1 dual channel	2NO	1 solid state	SI	440R-S12R2	£126.00
24V DC	1 dual channel	3NO	1 solid state	CI	440R-S13R2	£142.00
24V DC	2 dual channel	2NO	1 solid state	DI	440R-D22R2	£254.00
24V DC	2 dual channel	2 solid state	1 solid state	DIS	440R-D22S2	£208.00
24V DC	Stand still and speed monitor	N/A	1 solid state	GLP	440R-GL2S2P	£235.00
24V DC	Guardmaster Guard Locking safety relay with time delay	2 solid state 2 off delay solid state	2 solid state	GLT	440R-GL2S2T	£203.00
EtherNet/IP Network Interface module					440R-ENETR	£236.00

Expansion Modules - GSR



- BS EN ISO 13849-1 PL e
- 22.5MM wide housing
- BS EN IEC 62061 SIL3
- Pulsed link connection

Voltage	Channel	Safety Output	Time Relay	Aux Contact	Product Code	Price
24V DC	1 single wire	4NO	-	1 solid state	440R-EM4R2	£131.00
24V DC	1 single wire	4NO delayed	100ms...300ms off delay	1 solid state	440R-EM4R2D	£136.00

Safety Relay 440C - CR30



- BS EN ISO 13849-1 PL e
- USB programming port
- BS EN IEC 62061 SIL3
- 2 plug-in ports supporting Micro 800 plug-ins

Voltage	I/O	Max Plug-Ins	Product Code	Price
24V DC	22 Configurable I/O	2	440C-CR3022BBB	£458.00

Safety Relay 440C - CR30 I/O Modules



DI	DO	Relay	Product Code	Price
4	4	-	2080-IQ4OB4	£64.30
4	-	-	2080-IQ4	£40.00
-	4	-	2080-OB4	£40.00
-	-	4	2080-OW4I	£56.30
Guardmaster Ethernet Plug-in module, Slot 1			440C-ENET	£189.00
Project Backup and Restore module			2080MEMBAKRTC	£80.60

Safety Relay 440C - CR30 Accessories



Description	Product Code	Price
Power Supply 110...240V AC to 24V DC	2080PS120240VAC	£39.20

Non-contact Switches - Ferrogard 1/2/21



- Magnetically actuated safety switch
- High tolerance to misalignment
- Plastic rectangular housing
- Enclosure protection: IP67

Voltage	Safety Contact	Aux Contact	Cable	Product Code	Price
250V AC	1NC	-	2m	440N-G02001	£73.60
250V AC	1NC	-	4m	440N-G02004	£75.80
250V AC	1NC	1NO	2m	440N-G02002	£85.60
250V AC	1NC	1NO	4m	440N-G02014	£86.40
250V AC	2NC	1NO	2m	440N-G02055	£126.00
250V AC	2NC	1NO	4m	440N-G02061	£142.00
24V DC	2NC	1NO	2m	440N-G02058	£121.00
24V DC	2NC	1NO	4m	440N-G02077	£142.00

Non-contact Switches - Ferrogard 6/9



- Magnetically actuated safety switch
- High tolerance to misalignment
- Plastic rectangular housing
- Enclosure protection: IP67

Voltage	Safety Contact	Cable	Product Code	Price
250V AC	1NC	2m	440N-G02023	£80.70
250V AC	1NC	4m	440N-G02028	£79.80
24V DC	1NC	2m	440N-G02044	£70.90
24V DC	1NC	4m	440N-G02075	£88.60

Non-contact Switches - Ferrogard 2/21 GD2



- Magnetically actuated safety switch
- High tolerance to misalignment
- Stainless steel rectangular housing
- Enclosure protection: IP67

Voltage	Safety Contact	Aux Contact	Cable	Product Code	Price
250V AC	1NC	1NO	3m	440N-G02112	£141.00
24V DC	1NC	1NO	3m	440N-G02118	£141.00
250V AC	2NC	1NO	3m	440N-G02117	£131.00
24V DC	2NC	1NO	3m	440N-G02123	£127.00

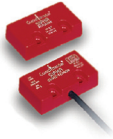
Non-contact Switches - Magnetically Coded MC1 and MC2



- Non-contact actuation
- High tolerance to misalignment
- Magnetic coded sensing
- Designed for use with various Guardmaster safety relays

Voltage	Indicator	Safety Output	Aux Output	Connection	Product Code	Price
24V DC	No	2NC (reeds)	-	M12 8 pin	440N-Z2NRS1C	£34.90
24V DC	No	2NC (reeds)	-	3m cable	440N-Z2NRS1A	£34.90
24V DC	No	2NC (reeds)	-	10m cable	440N-Z2NRS1B	£46.30
24V DC	Yes	2NC solid state	1 x PNP	M12 8 pin	440N-Z21W1PH	£53.10
24V DC	Yes	2NC solid state	1 x PNP	3m cable	440N-Z21W1PA	£53.10
24V DC	Yes	2NC solid state	1 x PNP	10m cable	440N-Z21W1PB	£64.80

Non-contact Switches - Sipa Sensor S1



- Non-contact actuation
- Magnetic coded sensing
- Plastic rectangular housing
- Enclosure protection: IP67
- Must be operated with a Sipa control unit

Safety Contact	Aux Contact	Cable	Product Code	Price
1NC+1NO	-	3m	440N-S32014	£33.00
1NC+1NO	-	10m	440N-S32016	£44.70
1NC+1NO	1NC	3m	440N-S32022	£43.10
1NC+1NO	1NC	10m	440N-S32032	£59.40
1NC+1NO	1NO	3m	440N-S32037	£43.10
1NC+1NO	1NO	10m	440N-S32036	£59.40

Non-contact Switches - Sipa Sensor S2



- Non-contact actuation
- Magnetic coded sensing
- Plastic slim housing
- Enclosure protection: IP67
- Must be operated with a Sipa control unit

Safety Contact	Aux Contact	Cable	Product Code	Price
1NC+1NO	-	3m	440N-S32015	£33.00
1NC+1NO	-	10m	440N-S32017	£50.60
1NC+1NO	1NC	3m	440N-S32023	£43.10
1NC+1NO	1NC	10m	440N-S32033	£62.70
1NC+1NO	1NO	3m	440N-S32038	£43.10
1NC+1NO	1NO	10m	440N-S32039	£62.70

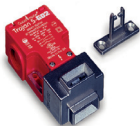
Non-contact Switches - Sipa Control Units



- Multiple sensors can be connected to one controller
- Controller doubles up as a safety controller
- BS EN 954-1 Category 4

Voltage	Safety Contact	Aux Contact	Product Code	Price
24V AC/DC	1NO	1NC solid state	440N-S32013	£117.00
24V AC/DC, 110/230V AC	2NO	1NC	440N-S32021	£136.00

Universal Tongue Switch - Trojan 5 GD2



- Self-ejecting tamper resistant actuator only operates when fixed to a guard
- Four possible actuator entry points
- Stainless steel head
- Enclosure protection: IP67
- Conduit entry: 3 x M20

Safety Contact	Aux Contact	Actuator	Product Code	Price
2NC	1NO BBM	-	440K-T11147	£31.30
Actuator		Std	440G-A27011	£5.95
Actuator		Fully flex	440G-A27143	£14.40

Non-contact Switches • Tongue Switches

Universal Tongue Switch - Trojan 15



- Four possible actuator entry points
- Enclosure protection: IP67
- Conduit entry: 3 x M20

Safety Contact	Aux Contact	Actuator	Product Code	Price
2NC	-	Std	440K-T11303	£25.20
1NC	1NO BBM	Std	440K-T11305	£23.90

Non-contact Switches - SensaGuard M18P



- RFID coded sensing
- High tolerance to misalignment
- BS EN 954-1 Category 4
- Plastic M18 barrel housing
- Enclosure protection: IP69K

Voltage	Safety Output	Aux Output	Cable	Sensing distance	Product Code	Price
24V DC	2PNP	PNP	3m	15mm	440N-Z21S16A	£71.90
24V DC	2PNP	PNP	10m	15mm	440N-Z21S16B	£83.80
24V DC	2PNP	PNP	3m	25mm	440N-Z21S26A	£89.90
24V DC	2PNP	PNP	10m	25mm	440N-Z21S26B	£102.00

Non-contact Switches - SensaGuard M18SS



- RFID coded sensing
- High tolerance to misalignment
- Stainless steel M18 barrel housing
- Enclosure protection: IP69K

Voltage	Safety Output	Aux Output	Cable	Sensing distance	Product Code	Price
24V DC	2PNP	PNP	3m	10mm	440N-Z21S17A	£113.00
24V DC	2PNP	PNP	10m	10mm	440N-Z21S17B	£126.00

Non-contact Switches - SensaGuard R



- RFID coded sensing
- High tolerance to misalignment
- Plastic rectangular housing
- Enclosure protection: IP69K

Voltage	Safety Output	Aux Output	Cable	Sensing distance	Product Code	Price
24V DC	2PNP	PNP	3m	18mm	440N-Z21SS2A	£74.90
24V DC	2PNP	PNP	10m	18mm	440N-Z21SS2B	£86.90
24V DC	2PNP	PNP	3m	18mm	440N-Z21SS2AN	£83.90
24V DC	2PNP	PNP	10m	18mm margin	440N-Z21SS2BN	£95.80
24V DC	2PNP	PNP	3m	18mm margin/magnetic	440N-Z21SS2AN9	£98.90
24V DC	2PNP	PNP	10m	18mm margin/magnetic	440N-Z21SS2BN9	£110.00

Miniature Tongue Switch - Elf



- Ideal for small, light-weight guards
- Eight possible actuator entry points
- Enclosure protection: IP67
- Conduit entry: M16
- Replacement for Cadet 1 and 2

Safety Contact	Aux Contact	Actuator	Product Code	Price
1NC	1NO	Flat	440K-E33036	£20.80
1NC	1NO	90°	440K-E33040	£20.80
2NC	-	Flat	440K-E33080	£20.80
2NC	-	90°	440K-E33041	£20.80

Actuator	Semi-flex	440K-A21030	£13.50
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Compact Tongue Switch - Cadet 3



- Ideal for small, light-weight guards
- Eight possible actuator entry points
- Enclosure protection: IP67
- Conduit entry: M16

Safety Contact	Aux Contact	Actuator	Product Code	Price
3NC	-	90°	440K-C21097	£25.20
2NC	1NO BBM	Flat	440K-C21098	£23.90
2NC	1NO BBM	90°	440K-C21061	£24.80
Actuator		Semi-flex	440K-A21030	£13.50

Universal Tongue Switch - Trojan 5



- Self-ejecting tamper resistant actuator only operates when fixed to a guard
- Four possible actuator entry points
- Enclosure protection: IP67
- Conduit entry: 3 x M20

Safety Contact	Aux Contact	Actuator	Product Code	Price
2NC	1NO BBM	Std	440K-T11090	£28.40
2NC	1NO BBM	Semi-flex	440K-T11110	£35.00
2NC	1NO BBM	Fully flex	440K-T11467	£32.30

Universal Tongue Switch - MT-GD2



- Metal body
- Eight possible actuator entry points
- BS EN 954-1 Category 1
- Enclosure protection: IP67
- Conduit entry: M20

Safety Contact	Aux Contact	Latch	Actuator	Product Code	Price
3NC	1NO BBM	-	-	440K-MT55002	£44.70
2NC	2NO BBM	-	-	440K-MT55005	£44.70
3NC	1NO BBM	Yes	-	440K-MT55039	£53.60
Actuator			Std	440G-A27011	£5.95
Actuator			Flat	440K-A11112	£4.30
Actuator			Fully flex	440G-A27143	£14.40

Guard Locking Switch - TLS-GD2



- Locks guard shut until machine is safe
- Rotable head, four possible key entry slots
- Enclosure protection: IP67
- Conduit entry: 3 x M20

Safety Contact	Voltage	Aux Contact	Monit Contact	Guard	Actuator	Product Code	Price
2NC	24V DC	1NO	1NO+1NC	Release	-	440G-T27121	£141.00
2NC	110V AC	1NO	1NO+1NC	Release	-	440G-T27124	£156.00
2NC	24V DC	1NO	1NO+1NC	Lock	-	440G-T27127	£138.00
2NC	110V AC	1NO	1NO+1NC	Lock	-	440G-T27132	£153.00
2NC	24V DC	1NO	2NC	Release	-	440G-T27134	£156.00
2NC	110V AC	1NO	2NC	Release	-	440G-T27138	£153.00
Actuator					Std	440G-A27011	£5.95
Actuator					Flat	440K-A11112	£4.30
Actuator					Fully flex	440G-A27143	£14.40

Guard Locking Switch - 440G-LZ



- RFID coded actuator
- Power to release or power to lock
- PLe, Cat 4, SIL3

Safety Contact	Voltage	Aux Contact	Guard	Cable	Actuator	Product Code	Price
2 x PNP	24V DC	1 x PNP	Release	3m cable	Standard	440G-LZS21SPRA	£164.00
2 x PNP	24V DC	1 x PNP	Release	M12 8pin	Standard	440G-LZS21SPRH	£164.00
2 x PNP	24V DC	1 x PNP	Lock	M12 8pin	Standard	440G-LZS21SPLH	£164.00
2 x PNP	24V DC	1 x PNP	Release	M12 8pin	Unique	440G-LZS21UPRH	£182.00

Guard Locking Switch - 440G-TLS-Z



- RFID coded actuator
- Power to release or power to lock
- PLe, Cat 4, SIL3
- Solid state outputs

Safety Contact	Aux Contact	Guard	Actuator	Product Code	Price
2 x PNP	1 x PNP	Release	Fully flex	440G-TZS21UPRH	£216.00
2 x PNP	1 x PNP	Lock	Fully flex	440G-TZS21UPLH	£216.00

Guard Locking Switch - Atlas 5



- Locks guard shut until machine is safe
- High tolerance to misalignment
- Heavy duty die-cast alloy housing
- Enclosure protection: IP65
- Conduit entry: 3 x M20

Safety Contact	Voltage	Aux Contact	Monit Contact	Guard	Actuator	Product Code	Price
2NC	24V AC/DC	1NO	2NC+1NC	Release	Std	440G-L07264	£287.00
2NC	110V AC	1NO	2NC+1NC	Release	Std	440G-L07263	£287.00
2NC	230V AC	1NO	2NC+1NC	Release	Std	440G-L07262	£287.00

Guard Locking Switch - 440G-MT



- Locks guard shut until machine is safe
- Heavy duty die-cast alloy housing
- Enclosure protection: IP67
- Conduit entry: 3 x M20

Safety Contact	Voltage	Aux Contact	Guard	Actuator	Product Code	Price
3NC	24V AC/DC	1NO	Lock	Std	440G-MT47037	£128.00
3NC	24V AC/DC	1NO	Lock	Fully flex	440G-MT47038	£146.00

Miniature Hinge Switch - Sprite



- Ideal for small, lightweight guards
- Four possible shaft positions
- Degree of operation can be adjusted
- Enclosure protection: IP67
- Conduit entry: M16
- For replacements for Ensign 1 and 2 use 80 x 10 dia. shaft

Safety Contact	Shaft	Product Code	Price
2NC	Solid - 80 x 10 dia.	440H-S34019	£20.70
2NC	Solid - 50 x 10 dia.	440H-S34010	£20.70

Compact Hinge Switch - Ensign 3



- Ideal for small, lightweight guards
- Four possible shaft positions
- Degree of operation can be adjusted
- Enclosure protection: IP67
- Conduit entry: M16

Safety Contact	Aux Contact	Shaft	Product Code	Price
3NC	-	Solid - 80 x 10 dia.	440H-E22025	£24.10
2NC	1NO BBM	Solid - 80 x 10 dia.	440H-E22027	£24.10
2NC	1NO BBM	Pre-bored - 30 x 16 dia.	440H-E22064	£24.10

Hinge Safety Switch - Rotacam



- Isolates power within 5° of door movement
- Degree of operation can be adjusted by adjustable cam
- Conduit entry: M20
- Robust die-cast, ideal for heavy duty applications
- Enclosure protection: IP66

Safety Contact	Aux Contact	Shaft	Product Code	Price
2NC	1NO BBM	Pre-bored - 30 x 16 dia.	440H-R03074	£41.00
2NC	1NO BBM	Solid - 85 x 12.7 dia.	440H-R03079	£41.00

Limit Switches - 440P Plastic



- Positive operation, forced disconnection of contacts
- Plastic housing
- Enclosure protection: IP66
- Conduit entry: M20

Actuator	Safety Contact	Aux Contact	Product Code	Price
Roller plunger	1NC	1NO snap	440P-CRPS11B	£17.20
Roller plunger	2NC	1NO BBM	440P-CRPB12B	£18.40
Roller plunger	3NC	-	440P-CRPB03B	£18.40
Hinge lever	1NC	1NO snap	440P-CHLS11B	£18.20
Hinge lever	2NC	1NO BBM	440P-CHLB12B	£19.10
Hinge lever	3NC	-	440P-CHLB03B	£19.10
Short lever	1NC	1NO snap	440P-CSLS11B	£13.40
Short lever	2NC	1NO BBM	440P-CSLB12B	£14.50
Short lever	3NC	-	440P-CSLB03B	£14.50
Adjustable lever	1NC	1NO snap	440P-CALS11B	£14.20
Adjustable lever	2NC	1NO BBM	440P-CALB12B	£16.10
Adjustable lever	3NC	-	440P-CALB03B	£16.10

Limit Switches - 440P Metal



- Positive operation, forced disconnection of contacts
- Metal housing
- Enclosure protection: IP66
- Conduit entry: M20

Actuator	Safety Contact	Aux Contact	Product Code	Price
Roller plunger	1NC	1NO snap	440P-MRPS11B	£24.00
Roller plunger	2NC	2NO BBM	440P-MRPB22B	£28.60
Roller plunger	3NC	1NO BBM	440P-MRPB13B	£28.60

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Actuator	Safety Contact	Aux Contact	Product Code	Price
Roller plunger	4NC	-	440P-MRPB04B	£28.60
Metal dome	1NC	1NO snap	440P-MDPS11B	£21.60
Metal dome	2NC	2NO BBM	440P-MDPB22B	£26.60
Short lever	1NC	1NO snap	440P-MSLS11B	£24.40
Short lever	2NC	2NO BBM	440P-MSLB22B	£28.80
Short lever	3NC	1NO BBM	440P-MSLB13B	£28.80
Short lever	4NC	-	440P-MSLB04B	£28.80

Rope Pull Switches - Lifeline 3



- Positive operation, forced disconnection of contacts, can only be reset by turning the blue reset knob
- Heavy-duty die-cast aluminium alloy housing
- Enclosure protection: IP67
- Conduit entry: M20
- For use with LRTS (Lifeline Rope Tensioner System)

Safety Contact	Aux Contact	Max Rope Length	Product Code	Price
2NC	2NO	30m	440E-D13118	£54.90
Eyebolt			440E-A17003	£2.56
Tensioner spring			440E-A13078	£4.33

Rope Pull Switches - Lifeline 4



- Positive operation, forced disconnection of contacts, can only be reset by turning the blue reset knob
- Emergency stop button included to provide e-stop access at the extreme ends of the span
- Heavy-duty die-cast aluminium alloy housing
- Enclosure protection: IP66
- Conduit entry: M20
- For use with LRTS (Lifeline Rope Tensioner System)

Safety Contact	Aux Contact	Max. Rope Length	Product Code	Price
2NC	2NO	75m	440E-L13137	£80.40
3NC	1NO	75m	440E-L13042	£80.40
2NC	2NO	125m	440E-L13153	£110.00
Eyebolt			440E-A17003	£2.56
Tensioner spring			440E-A13078	£4.33

Rope Tensioner System - LRTS



- System comprises length of wire, 2 grippers, 1 tensioner and eyebolts
- Tensioner can be situated in a range of locations along the wire length (no cutting required)

Wire Length	Product Code	Price
5m	440E-A13079	£34.60
10m	440E-A13080	£40.20
15m	440E-A13081	£57.00
20m	440E-A13082	£65.60
30m	440E-A13083	£83.40
50m	440E-A13084	£121.00
75m	440E-A13085	£149.00

Grab-Wire Switches - Lifeline 4 Stainless Steel



- Switches up to 75m span
- Switch lockout on cable pulled and cable slack
- Cable status indicator on switch lid
- Universal mounting and operation
- Lid mounted emergency stop button, designed to conform to ISO 850

Safety Contact	Aux Contact	Max Rope Length	Connection	Product Code	Price
2NC	2NO	Up to 75 m	M20	440E-L22BNSM	£163.00
2NC	2NO	Up to 75 m	1/2 inch NPT	440E-L22BNST	£163.00
2NC	2NO	Up to 75 m	M23 12pin	440E-L22BNSL	£194.00

Stainless steel installation kit - 5m - polypropylene	440E-A13194	£93.00
Stainless steel installation kit - 10m - polypropylene	440E-A13195	£97.10
Stainless steel installation kit - 15m - polypropylene	440E-A13196	£109.00
Stainless steel installation kit - 20m - polypropylene	440E-A13197	£112.00
Stainless steel installation kit - 30m - polypropylene	440E-A13198	£128.00
Stainless steel installation kit - 50m - polypropylene	440E-A13199	£164.00
Stainless steel installation kit - 75m - UV resistant	440E-A13226	£164.00

POC GuardShield Type 4 Safe 4 Light Curtains



- M12 connectors
- Integrated laser alignment system
- Optically synchronised
- IP65 enclosure rating

Resolution	Height	Beams	Product Code	Price
14mm	120mm	16	445L-P4L0120YD	£544.00
14mm	240mm	32	445L-P4L0240YD	£698.00
14mm	360mm	48	445L-P4L0360YD	£871.00
14mm	480mm	64	445L-P4L0480YD	£1130.00
14mm	600mm	80	445L-P4L0600YD	£1270.00
14mm	720mm	96	445L-P4L0720YD	£1450.00
14mm	840mm	112	445L-P4L0840YD	£1570.00
14mm	960mm	128	445L-P4L0960YD	£1720.00
14mm	1080mm	144	445L-P4L1080YD	£1930.00
14mm	1200mm	160	445L-P4L1200YD	£2130.00
14mm	1320mm	176	445L-P4L1320YD	£2320.00
14mm	1440mm	172	445L-P4L1440YD	£2510.00
14mm	1560mm	188	445L-P4L1560YD	£2750.00
14mm	1680mm	204	445L-P4L1680YD	£2830.00
14mm	1800mm	220	445L-P4L1800YD	£2980.00
14mm	1920mm	236	445L-P4L1920YD	£3100.00

30mm	120mm	8	445L-P4S0120YD	£529.00
30mm	240mm	16	445L-P4S0240YD	£625.00
30mm	360mm	94	445L-P4S0360YD	£797.00
30mm	480mm	94	445L-P4S0480YD	£938.00
30mm	600mm	94	445L-P4S0600YD	£1110.00
30mm	720mm	94	445L-P4S0720YD	£1270.00
30mm	840mm	94	445L-P4S0840YD	£1430.00

Grab Wire Switches • Light Curtains

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Resolution	Height	Beams	Product Code	Price
30mm	960mm	94	445L-P4S0960YD	£1590.00
30mm	1080mm	94	445L-P4S1080YD	£1780.00
30mm	1200mm	94	445L-P4S1200YD	£1900.00
30mm	1320mm	94	445L-P4S1320YD	£2100.00
30mm	1440mm	94	445L-P4S1440YD	£2190.00
30mm	1560mm	102	445L-P4S1560YD	£2380.00
30mm	1680mm	102	445L-P4S1680YD	£2500.00
30mm	1800mm	110	445L-P4S1800YD	£2620.00
30mm	1920mm	118	445L-P4S1920YD	£2740.00

PAC GuardShield Type 4 Safe 4 Light Curtains



- M12 connectors
- Integrated laser alignment system
- Optically synchronised
- IP65 enclosure rating

Protected Height	Beams	Spacing	Pair Weight	Product Code	Price
600mm	2	500mm	4.0kg	445L-P4S2500YD	£698.00
840mm	3	400mm	4.5kg	445L-P4S3400YD	£812.00

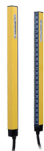
M12 DC Cordsets - Micro

Light Curtains



Connectors	Sheath	Pole	Configuration	Length	Product Code	Price
M12 female/flying lead	PVC	4	Straight	2m	889D-F5AC-2	£10.70
M12 female/flying lead	PVC	4	Straight	5m	889D-F5AC-5	£13.70
M12 female/flying lead	PVC	4	Straight	10m	889D-F5AC-10	£19.10
M12 female/flying lead	PVC	4	Straight	15m	889D-F5AC-15	£24.30
M12 female/flying lead	PVC	4	Straight	20m	889D-F5AC-20	£29.60

GuardShield Type 4 Micro 400 Safety Light Curtains



- Compact Type 4, SIL 3, PLe safety light curtains
- Minimal dead space of optic heads

Resolution	Height	Beams	Product Code	Price
14mm	150mm	15	445L-P4C0150FP	£365.00
14mm	300mm	30	445L-P4C0300FP	£553.00
14mm	450mm	45	445L-P4C0450FP	£818.00
14mm	600mm	60	445L-P4C0600FP	£996.00
14mm	750mm	75	445L-P4C0750FP	£1170.00
14mm	900mm	90	445L-P4C0900FP	£1350.00
14mm	1050mm	105	445L-P4C1050FP	£1610.00
14mm	1200mm	120	445L-P4C1200FP	£1850.00
30mm	150mm	6	445L-P4E0150FP	£253.00
30mm	300mm	12	445L-P4E0300FP	£406.00
30mm	450mm	18	445L-P4E0450FP	£606.00
30mm	600mm	24	445L-P4E0600FP	£750.00
30mm	750mm	30	445L-P4E0750FP	£922.00
30mm	900mm	36	445L-P4E0900FP	£1210.00
30mm	1050mm	42	445L-P4E1050FP	£1350.00
30mm	1200mm	48	445L-P4E1200FP	£1600.00

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Description	Product Code	Price
1m patchcord, PVC jacket	445L-AC8RJ1	£9.20
2m patchcord, PVC jacket	445L-AC8RJ2	£9.49
3m patchcord, PVC jacket	445L-AC8RJ3	£9.72
5m patchcord, PVC jacket	445L-AC8RJ5	£12.10
8m patchcord, PVC jacket	445L-AC8RJ8	£17.00

MSR41 - ON/OFF



Mounting	Size	Product Code	Price
35mm DIN Rail	22.5mm	440R-P221AGS	£94.50

Multi-function Relay - MSR42



- Multi-function, muting and light curtain applications
- BS EN ISO 13849-1 PL e
- BS EN 954-1 Category 4
- BS EN IEC 62061 SIL3
- Stop category: 0,1

Mounting	Size	Product Code	Price
35mm DIN Rail	22.5mm	440R-P226AGS-NNR	£285.00

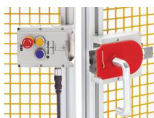
Safety Laser Scanner - 442L



- Designed for stationary and mobile applications
- BS EN ISO 13849-1 PL e
- Class 1 laser (eye safe)
- BS EN IEC 61508 SIL2
- Type 3 per IEC 61496

Description	Product Code	Price
SafeZone Mini safety laser scanner	442L-SFZNMN	£2310.00
SafeZone Mini M12 shielded 8-conductor cordset, 2.5 meters	442L-ACABL2	£41.90
2 meter RS232 programming cable with USB connector	442L-ACUSB-2	£64.00
SafeZone Mini Mounting Bracket 1	442L-AMBSZMN1	£31.90

Multifunctional Access Box



Description	Product	Price
Lock Module, 442G Access Box, Power to Release, Unique code	442G-MABR-URM-C03	£641.00
M23 Connector, Right-hand Guard, Estop, push buttons		
Handle Assembly, 442G Access Box, Right-Hinged Door, with Bolt Locking Mechanism	442G-MABH-R	£216.00
Lock Module 442G Access Box, Power to Release, Unique Code, M23 Connector, Left-hand Guard, Estop, 2 push buttons	442G-MABR-ULM-C03	£641.00
Handle Assembly, 442G Access Box, Left-Hinged Door, with Bolt Locking Mechanism	442G-MABH-L	£216.00

Sensors

Many of our sensing products are already IO-Link enabled and these are indicated in this catalogue by the IO-Link symbol. If you need this technology please check with us as the list of enabled devices is continually growing. IO-Link sensors can also be used as conventional sensors.

Features and benefits:

- Large range of mounting options aids commissioning and set-up
- Quick disconnect option speeds replacement and reduces down-time
- World-wide approvals ensure customer acceptability and compliance



I/O Link



Description	Product	Price
4 point IO-Link Master Module for Point I/O	1734-4IOL	£144.00

42EF RightSight



- Compact right angle housing
- Flexible 18mm mounting options
- Protection: IP67, 1200 psi washdown
- Connection type: 4-pin DC micro
- Use 18mm mounting bracket



Type	Voltage	Distance	Output	Product Code	Price
Standard diffuse	10.8...30V DC	3...500mm	PNP (LDO)	42EF-D1MPAK-F4	£38.30
Polarised retroreflective	10.8...30V DC	25mm...3m	NPN/PNP (DO)	42EF-P2KBB-F4	£42.10
Polarised retroreflective	10.8...30V DC	25mm...3m	PNP (LDO)	42EF-P2MPB-F4	£41.60
Sharp cutoff	10.8...30V DC	3...130mm	NPN/PNP (LO)	42EF-S1JBA-F4	£37.20
Sharp cutoff	10.8...30V DC	3...130mm	PNP (LDO)	42EF-S1MPA-F4	£35.40
Background suppression	10.8...30V DC	3...50mm	PNP (LDO)	42EF-B1MPBC-F4	£55.90
Background suppression	10.8...30V DC	3...100mm	PNP (LDO)	42EF-B1MPBE-F4	£55.90
Receiver	10.8...30V DC	8m	PNP (LDO)	42EF-R9MPBT-F4	£33.00
Receiver	10.8...30V DC	20m	PNP (LDO)	42EF-R9MPB-F4	£33.00
Transmitter	10.8...30V DC	-	-	42EF-E1EZB-F4	£21.70

42EF RightSight ClearSight



- General purpose plastic film and stretch-wrap detection
- Compact right angle housing
- Protection: IP67, 1200 psi washdown
- Connection type: 4-pin DC micro
- Use 18mm mounting bracket
- Supplied with reflector AB9290



Type	Voltage	Distance	Output	Product Code	Price
Clear object	10.8...30V DC	25mm...1m	NPN/PNP (DO)	42EF-C2KBA-F4	£64.50

42JT VisiSight™ Miniature Photoelectric Sensors



IO-Link

- Class 1 “Eye Safe” red laser beam and visible red LED light source models
- Teach push button for sensitivity and L.O/D.O selection
- Connection type: 4-pin DC pico (M8)
- Unique “auto PNP/NPN” output reduces stocking cost and simplifies installation and maintenance
- Protection: IP67 and IP69K

Type	Voltage	Distance	Sensitivity	Output	Product Code	Price
Standard diffuse	10...30V DC	800mm	Teachable	NPN/PNP (LDO)	42JT-D2LAT1-P4	£57.40
Standard diffuse	10...30V DC	250mm	Teachable	NPN/PNP (LDO)	42JT-D8LAT1-P4	£90.00
Polarised retroflective	10...30V DC	13m	Teachable	NPN/PNP (LDO)	42JT-P2LAT1-P4	£59.50
Polarised retroflective	10...30V DC	6m	Teachable	NPN/PNP (LDO)	42JT-P8LAT1-P4	£93.50
Clear object	10...30V DC	2m	Teachable	NPN/PNP (LDO)	42JT-C2LAT1-P4	£108.00
Background suppression	10...30V DC	180mm	Teachable (LDO)	NPN/PNP	42JT-B2LAT1-P4	£79.60
Background suppression	10...30V DC	400mm	Teachable (LDO)	NPN/PNP	42JT-B2LAT2-P4	£90.00
Background suppression	10...30V DC	120mm	Teachable (LDO)	NPN/PNP	42JT-B8LAT1-P4	£122.00
Receiver	10...30V DC	13m	Teachable (LDO)	NPN/PNP	42JT-R9LAT1-P4	£44.30
Receiver	10...30V DC	18m	Teachable (LDO)	NPN/PNP	42JT-R8LAT1-P4	£49.80
Transmitter	10...30V DC	13m	No adjustment	N/A	42JT-E2EZB1-P4	£34.00
Transmitter	10...30V DC	18m	No adjustment	N/A	42JT-E8EZB1-P4	£58.80

42JS VisiSight™ Miniature Photoelectric Sensors



- Visible red LED for ease of alignment
- Linear sensitivity adjustment knob or no adjustment models
- Protection: IP67
- Complementary light and dark operate outputs
- Optional snap-on adapter enables 18mm mount and makes sensor replacement a snap
- Connection type: 4-pin DC Micro (M12)

Type	Voltage	Distance	Sensitivity	Output	Product Code	Price
Standard diffuse	10...30V DC	250mm	Adjustment knob	PNP (LDO)	42JS-D2MPA2-F4	£37.00
Standard diffuse	10...30V DC	800mm	Adjustment knob	PNP (LDO)	42JS-D2MPA1-F4	£37.00
Polarised retroflective	10...30V DC	3.5m	No adjustment	PNP (LDO)	42JS-P2MPB1-F4	£37.50
Polarised retroflective	10...30V DC	3.5m	Adjustment knob	PNP (LDO)	42JS-P2MPA2-F4	£40.30
Background suppression	10...30V DC	55mm	No adjustment	PNP (LO)	42JS-B2MPB1-F4	£42.70
Background suppression	10...30V DC	130mm	No adjustment	PNP (LO)	42JS-B2MPB2-F4	£42.70
Receiver	10...30V DC	10m	Adjustment knob	PNP (LDO)	42JS-R9MPA1-F4	£30.20
Transmitter	10...30V DC	10m	No adjustment	N/A	42JS-E1EZB1-F4	£22.20

Optical Fork - 45LSP



- Fork style housing
- Protection: IP67
- Housing material: Polycarbonate
- Connection type: 4-pin DC pico

Sensing Gap	Voltage	Output	Product Code	Price
30mm	10...30V DC	PNP (LDO)	45LSP-2LPA1-P4	£69.20
50mm	10...30V DC	PNP (LDO)	45LSP-2LPA2-P4	£69.20
80mm	10...30V DC	PNP (LDO)	45LSP-2LPA3-P4	£69.20
120mm	10...30V DC	PNP (LDO)	45LSP-2LPA4-P4	£69.20

T 0370 607 1000

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**Rockwell
Automation**

Photoelectric Sensors

42CA Plastic Barrel



- 18mm industry standard package
- Housing material: PBT
- Protection: IP67
- Connection type: 4-pin DC micro
- Use 18mm mounting bracket

Type	Voltage	Distance	Output	Product Code	Price
Standard diffuse	10...30V DC	100mm	Complementary (LDO)	42CA-D1MPAE-D4	£29.60
Standard diffuse	10...30V DC	400mm	Complementary (LDO)	42CA-D1MPAJ-D4	£29.60
Retroreflective	10...30V DC	4.8m	Complementary (LDO)	42CA-U2MPB-D4	£34.60
Polarised retroreflective	10...30V DC	3.8m	Complementary (LDO)	42CA-P2MPB-D4	£35.80
Background suppression	10...30V DC	50mm	PNP (LDO)	42CA-B2LPBC-D4	£51.70
Background suppression	10...30V DC	100mm	PNP (LDO)	42CA-B2LPBE-D4	£51.70

42BT Slim Flatpack



- Slim flatpack housing design
- Protection: IP50
- Connection type: 4-pin DC micro

Type	Voltage	Distance	Output	Product Code	Price
Background suppression	12...24V DC	0.2...2m	NPN/PNP (LDO)	42BT-B2LBSL-F4	£113.00
Background suppression	12...24V DC	0.2...2m	NPN/PNP (LDO)	42BT-B1LBSN-F4	£113.00

872C 3-wire DC



- Plastic face, nickel-plated brass barrel
- 3-wire DC
- Inductive
- Protection: IP67
- Connection type: 4-pin DC micro

Size	Voltage	Distance	Shield	Output	Product Code	Price
8mm	10...30V DC	2mm	Yes	NO	872C-D2NP8-D4	£26.80
8mm	10...30V DC	3mm	No	NO	872C-D3NP8-D4	£26.80
12mm	10...30V DC	3mm	Yes	NO	872C-D3NP12-D4	£21.00
12mm	10...30V DC	4mm	No	NO	872C-D4NP12-D4	£21.00
18mm	10...30V DC	5mm	Yes	NO	872C-D5NP18-D4	£23.80
18mm	10...30V DC	8mm	No	NO	872C-D8NP18-D4	£23.80
30mm	10...30V DC	10mm	Yes	NO	872C-D10NP30-D4	£25.50
30mm	10...30V DC	15mm	No	NO	872C-D15NP30-D4	£25.50

872C 3-wire DC Short



Size	Voltage	Distance	Shield	Output	Product Code	Price
12mm	10...30V DC	3mm	Yes	NO	872C-DH3NP12-D4	£21.00
12mm	10...30V DC	4mm	No	NO	872C-DH4NP12-D4	£21.00
18mm	10...30V DC	5mm	Yes	NO	872C-DH5NP18-D4	£23.80
30mm	10...30V DC	10mm	Yes	NO	872C-DH10NP30-D4	£25.50
30mm	10...30V DC	15mm	No	NO	872C-DH15NP30-D4	£25.50

Stainless Steel I/O Link Enabled Inductive Sensors



IO-Link

Size	Voltage	Distance	Shield	Output	Product Code	Price
5mm	10...30V DC	1.5	Yes	PNP	871C-M2NP5-E2	£61.30
12mm	10...30V DC	6	Yes	PNP	871TM-M6NP12-D4	£60.00
12mm	10...30 V DC	10	No	PNP	871TM-N10NP12-D4	£60.00
18mm	10...30V DC	10	Yes	PNP	871TM-M10NP18-D4	£67.00
18mm	10...30V DC	20	No	PNP	871TM-N20NP18-D4	£67.00

872C 3-wire Lone Range



IO-Link

Size	Voltage	Distance	Shield	Output	Product Code	Price
12mm	10...30V DC	4mm	No	NO	872C-N8NP12-D4	£26.10
18mm	10...30V DC	8mm	Yes	NO	872C-M8NP18-D4	£28.40
18mm	10...30V DC	12mm	No	NO	872C-N12NP18-D4	£28.40

873M Ultrasonic



- 18mm Package
- 50mm Long Metal Body

- Digital or Analogue output modes
- Connection type: 4-pin DC micro

Voltage	Distance	Output	Product Code	Price
15-30 VDC	30-300mm	N.O./N.C. PNP	873M-D18PO300-D4	£83.20
15-30 VDC	30-800mm	4-20 mA	873M-D18AI800-D4	£99.50
Optional Programming Cable			873M-PROGCABLE	£93.90

Swivel/Tilt Mounting Brackets



Size	Type	Adjustment	For Use With	Product Code	Price
18mm	Swivel/tilt	10° tilt	RightSight	60-2649	£4.89
30mm	Swivel/tilt	10° tilt	Series 9000	60-2439	£6.09

Snap Clamp Mounting Brackets



Size	Type	Product Code	Price
12mm	Snap clamp	871A-SCBP12	£3.45
18mm	Snap clamp	871A-SCBP18	£3.45

Right Angle Mounting Brackets



Size	Type	Adjustment	For Use With	Product Code	Price
18mm	Right angle	30° horizontal	RightSight, 42CA	60-2657	£4.29

Right Angle Bracket



Size	Type	For Use With	Product Code	Price
33 x 24 x 14mm	Right angle	42JS and 42JT	60-BJS-L1	£4.16
39 x 33 x 14mm	Right angle	42JS	60-BJS-L2	£4.16
64 x 33 x 14mm	Right angle	42JT	60-BJT-L2	£3.92

Snap-on Adapter



Size	Type	For Use With	Product Code	Price
18mm	Snap-on	42JS	60-AJS-18	£3.05

Reflectors



Size	Mounting	Product Code	Price
32mm	Requires adhesive backing	92-47	£3.68
32mm	M5 screw mount	92-105	£7.37
76mm	Centre mount, plastic back	92-39	£4.89
76mm	Centre mount, aluminium back	92-89	£5.93
63mm	Mounting tabs	92-90	£4.89
23 x 42.5mm	Mounting tabs/bracket	92-93	£7.37
23.5 x 55mm	Mounting tabs	92-112	£5.93
51 x 61mm	Mounting tabs	92-109	£7.41
51 x 100mm	With adhesive backing	92-119	£5.93
100 x 100mm	Mounting tabs	92-108	£16.70
25 x 2540mm	Reflective tape	92-99	£17.80

Reflector Brackets



Size	Adjustment	For Use With	Product Code	Price
50 x 200mm	Vertical height	Reflectors up to 76mm	60-2718	£14.10
50 x 300mm	Vertical height	Reflectors up to 76mm	60-2720	£14.10

M8 DC Cordsets - Pico



Connectors	Sheath	Pole	Configuration	Length	Product Code	Price
M8 female/flying lead	PVC	3	Straight	5m	889P-F3AB-5	£11.30
M8 female/flying lead	PUR	3	Straight	5m	889P-F3UB-5	£14.30
M8 female/flying lead	PVC	3	Right angle	5m	889P-R3AB-5	£11.30
M8 female/flying lead	PUR	3	Right angle	5m	889P-R3UB-5	£14.30
M8 female/flying lead	PVC	4	Straight	5m	889P-F4AB-5	£11.70
M8 female/flying lead	PVC	4	Right angle	5m	889P-R4AB-5	£11.70

M8 DC Connectors - Pico



Connectors	Sheath	Pole	Configuration	Product Code	Price
M8 female/IDC	PVC	3	Straight	889P-F3DC-H	£8.92
M8 male/IDC	PVC	3	Straight	889P-M3DC-H	£8.92
M8 female/IDC	PVC	4	Straight	889P-F4DC-H	£9.47
M8 male/IDC	PVC	4	Straight	889P-M4DC-H	£9.47

M12 DC Cordsets - Micro



Connectors	Sheath	Pole	Configuration	Length	Product Code	Price
M12 female/flying lead	PVC	4	Straight	5m	889D-F4AC-5	£9.49
M12 female/flying lead	PUR	4	Straight	5m	889D-F4UC-5	£13.50
M12 female/flying lead	PVC	4	Right angle	5m	889D-R4AC-5	£9.49
M12 female/flying lead	PUR	4	Right angle	5m	889D-R4UC-5	£13.50
M12 female/flying lead	PVC	5	Straight	5m	889D-F5AC-5	£13.70
M12 female/flying lead	PVC	5	Right angle	5m	889D-R5AC-5	£13.70

M12 DC Connectors - Micro



Connectors	Pole	Configuration	Product Code	Price
M12 female/IDC	4	Straight	889D-F4DC-H	£8.92
M12 male/IDC	4	Straight	889D-M4DC-H	£8.92
M12 female/IDC	4	Right angle	889D-R4DC-H	£11.00
M12 male/IDC	4	Right angle	889D-E4DC-H	£11.00
M12 female/screw	4	Straight	871A-TS4-D	£18.60
M12 male/screw	4	Straight	871A-TS4-DM	£18.60
M12 female/screw	4	Right angle	871A-TR4-D	£18.60
M12 male/screw	4	Right angle	871A-TR4-DM	£18.60

Product Code Guide

20F	PowerFlex 753 HighPerformance AC Drives	14-4	440P	Limit Switches	16-8
22F	PowerFlex 4M AC Drives	14-1	440R	Safety Relays	16-1
25A/B	PowerFlex 523 & 525 AC Drives	14-2	440C	CR 30 Safety Relays	16-2
42	Photoelectric Sensors	17-1	445L	Light Curtains	16-10
100K	Mini Contactors	2-1	700	Relays	5-1
100(S)C	Contactors & Safety Contactors	2-3	800F	Pushbuttons & Indicators	8-1
140A	Manual Motor Starters	1-1	817S	Thermistor Monitors	3-4
140M	Motor Protection Circuit Breakers	1-2	855P	Signals and Sounders	9-1
140G	Moulded Case Circuit Breakers	6-4	855T	Tower Lights	9-2
141A	Mounting System (busbar system)	4-1	871	Stainless Steel Proximity Switches	17-4
150	SMC Soft Starters	13-1	872	Proximity Switches	17-3
193K	Thermal Overload Relays	3-1	1492	Terminals	15-1
193T1	Thermal Overload Relays	3-1	1492F	Fuse Holders	6-6
193E	Electronic Overload Relays	3-2	1492SP	Miniature Circuit Breakers	6-1
194E	Isolators	7-1	1606	Power Supplies	10-1
194R	Switch Fuses	7-3	1763	MicroLogix 1100 PLCs	11-3
440E	Grab-wire Switches	16-10	1766	MicroLogix 1400 PLCs	11-3
440G	Guard Locking Switches	16-6	2080	Micro800 PLCs	11-1
440K	Tongue Switches	16-4	2085	Micro850 Expansion I/O	1-2
440N	Non-contact Switches	16-4	2711	PanelView Component	12-1

Product Index

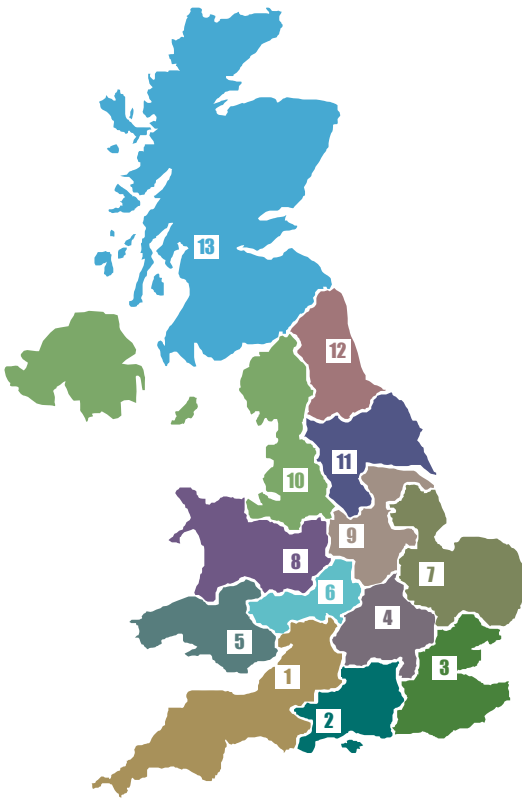
A		Guard Locking Switches	16-7	Overload Relays (Electronic)	3-2
Audible Alarms	9-1	H		P	
Auxiliary Contacts, Contactors	2-2	Handles, for Isolators	7-4	Padlock Attachment, for MCBs	6-4
Auxiliary Contacts, Isolators	7-2	Handles, for MPCBs	1-4	Photoelectric Sensors	17-1
Auxiliary Contacts, MCBs	6-3	Hinge Safety Switches	16-7	Pilot Lights	8-4
Auxiliary Contacts, MPCBs	1-3	HMIs, Operator Interfaces	2-1	PLCs, Micro	11-1
Auxiliary Contacts, Relays	5-1	I		Plug-in Relays	5-4
Auxiliary Contacts, Soft Starters	13-1	Illuminated Pushbuttons	8-3	Power Supplies	10-1
B		Intelligent Relays	11-1	Proximity Switches	17-3
Blanking Plug, 22.5mm	8-8	IO-Link devices	17-1	Pushbuttons	8-1
Brake Resistors, for AC Drives	14-2	Isolation Terminals	15-3	R	
Busbar Mounting Modules	4-2	Isolators	7-1	Reflectors	17-5
Busbar Supports 200...630A	4-1	J		Relays	5-1
Busbar Terminals	4-1	Jumper-bars, Terminals	15-1	Reset, Overload Reset Button	3-3
Busbars	4-1	K		Residual Current Devices	6-4
C		Key Selector Operators	8-5	S	
Comb Busbar, MCBs	6-4	L		Safety Contactors	2-5
Comms Modules, Soft Starters	13-2	Latch Attachments, Contactors	2-6	Safety Relays	16-1
Compact Power Supplies	10-1	Latch Attachments, Relays	5-3	Safety Relays (plug-in)	5-4
Connecting Module, Contactor	1-4	LED Elements	8-7	Selector Switch Operators	8-4
Contact Blocks, Pushbutton Type	8-6	Legend Frames/Plates	8-7	Single-phase Drives	14-1
Contactors	2-3	Light Curtains	16-11	Soft Starters	13-1
Control Relays	5-2	Limit Switches	16-8	Software, for Micro800 PLC	11-3
Cordsets, for Sensors	17-5	M		Software, for MicroLogix PLC	11-4
D		Manual Motor Starters	1-1	Stainless Steel Isolators	7-2
DeviceNet Overload Relays	3-3	Markers, Terminal System	15-4	Switch Fuses	7-3
Double Deck Terminals	15-2	Mechanical Interlock	2-2	T	
Drives, AC	14-1	Mini Contactors	2-1	Terminals	15-1
E		Miniature Circuit Breakers	6-1	Thermal Overload Relays	3-1
Earth Terminals, DIN-rail Mtg	15-2	Miniature Control Relays	5-1	Thermistor Monitor	3-4
Earth Terminals, for Isolators	7-3	Motor Protection Circuit Breakers	1-2	Three-phase Drives	14-1
Emergency Stop Operators	8-3	Mounting Adaptor, for Overloads	3-3	Timing Heads, Pneumatic	5-2
Emergency Stop Stations	8-9	Mounting Brackets, for Sensors	17-4	Timing Relays & Modules	5-5
Enclosures, for Pushbuttons	8-8	Mounting Rail	15-3	Tongue Switches	16-4
F		Mounting System	4-1	Touch Screens	12-1
Filters, EMC type for AC Drives	14-1	N		Tower Lights	9-2
Fuse Holders	6-6	Neutral Terminal, for Isolators	7-2	W	
Fuse Terminals	15-3	Non-contact Safety Switches	16-3	Wiring Kit, Reversing & Y/D	2-3
G		O			
Grab-wire Switches	16-10	Overload Relays (Thermal)	3-1		

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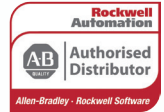
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