GONTROL

Quick Selector Guide





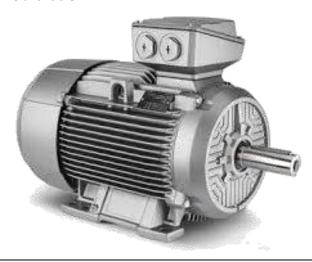


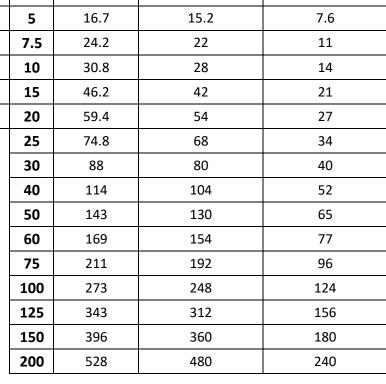
Motor Current Rating Chart for Full Load Amps

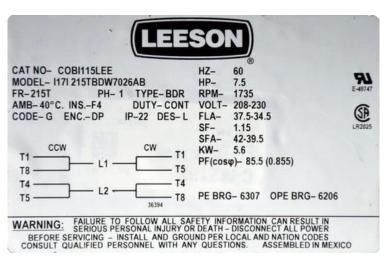
1-Phase AC Motor F.L.A.				3-Phase AC Motor F.L.A.			
HP	110-120 Volts	220-240 Volts	HP	208 Volts	220-240 Volts	440-480 Volts	
1/4	5.8	2.9	1/2	2.4	2.2	1.1	
1/3	7.2	3.6	3/4	3.5	3.2	1.6	
1/2	9.8	4.9	1	4.6	4.2	2.1	
3/4	13.8	6.9	1.5	6.6	6	3	
1	16	8	2	7.5	6.8	3.4	
1.5	20	10	3	10.6	9.6	4.8	
2	24	12	5	16.7	15.2	7.6	
3	34	17	7.5	24.2	22	11	
5	56	28	10	30.8	28	14	
7.5	80	40	15	46.2	42	21	
10	100	50	20	59.4	54	27	
•			25	74.8	68	34	
			20	00	90	40	

The full-load current values are for motors running at usual speeds and motors with normal torque characteristics. Motors built for especially low speeds or high torques may have higher full-load currents, and multi-speed motors will have full- load currents varying with speed. In these cases, the nameplate current ratings should be used.

This table is intended to be a general guide for AC motor Full Load Amperes. Always use the F.L.A. written on the motor nameplate first if it is available.









Womack Electric Supply Company's focus on the Industrial market brings the resources that promote energy savings, increase efficiency, reduce downtime, and save money. Womack Electric provides industrial solutions by understanding the business, anticipating needs, and working to attack the most critical areas. From world class products to trained specialists, Womack Electric is the local source to serve this rapidly changing market.

Established in 1938, Womack Electric's customer centric philosophy serves to focus our efforts on consistent conformance to customer expectations for quality products and professional service. We understand that our own success is a direct result of the success of those we serve. We articulate this philosophy every day in the capabilities and pride of workmanship of every Womack Electric employee serving you.

Womack Electric is proud to be a member of the Crescent Electric Supply family and is dedicated to being the leading distributor of quality products and value-added services. Crescent Electric is one of the eight largest electrical distribution companies in the U.S. Crescent Electric serves contractors, as well as, commercial, institutional and industrial customers with a broad line of electrical, lighting, industrial, automation and datacomm products from 140+ branches nationwide.

Contact your local Womack Electric Supply representative to learn more about Womack's product and service solutions.

Let us show you what customer service is about!

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Notification Products

IEC Contactors & Starters



Part Number	Description	HP @480V	Frame
XTCE009B10A	Contactor 9A, 120V Coil	5	В
XTCE009B10TD	Contactor 9A, 24VDC Coil	5	В
XTCE009B10T	Contactor 9A, 24VAC Coil	5	В
XTCE012B10A	Contactor 12A, 120V Coil	10	В
XTCE015B10TD	Contactor 15A, 24VDC Coil	10	В
XTCE018C10A	Contactor 18A, 120V Coil	10	С
XTCE018C10TD	Contactor 18A, 24VDC Coil	10	С
XTCE025C10A	Contactor 25A, 120V Coil	15	С
XTCE032C10A	Contactor 32A, 120V Coil	20	С
XTCE032C10TD	Contactor 32A, 24VDC Coil	20	С
XTCE040D00A	Contactor 40A, 120V Coil	30	D
XTCE050D00A	Contactor 50A, 120V Coil	40	D
XTCE065D00A	Contactor 65A, 120V Coil	50	D
XTCE080F00A	Contactor 80A, 120V Coil	60	F
XTCE095F00A	Contactor 95A, 120V Coil	75	F

EATON XT Solid State Electronic Overload Relays

Part Number	Description	Frame
XT0E005BCS	SS Overload 1-5A Frame B	В
XT0E020BCS	SS Overload 4-20A Frame B	В
XT0E005CCS	SS Overload 1-5A Frame C	С
XT0E020CCS	SS Overload 4-20A Frame C	С
XT0E045CCS	SS Overload 9-45A Frame C	С
XT0E045DCS	SS Overload 9-45A Frame D	D
XT0E100DCS	SS Overload 20-100A Frame D	D
XT0E100GCS	SS Overload 20-100A Frame F	F

EATON Auxiliary Contacts and Accessories

Part Number	Description	Frame
XTOBXDINC	DIN Rail Adapter CC1	B-C
XTCEXFAC11	Aux Contact, Top 1NO-1NC	B-C
XTCEXFAC22	Aux Contact, Top 2NO-2NC	B-C
XTCEXFAG11	Aux Contact, Top 1NO-1NC	D-G
XTCEXFAG22	Aux Contact, Top 2NO-2NC	D-G

EATON XT Solid State Electronic Overload Relays Remote Mount

Part Number	Description
XTOE005CCSS	Solid State Overload, 1-5 AMP, Stand Alone
XTOE020CCSS	Solid State Overload, 4-20 AMP, Stand Alone
XTOE045CCSS	Solid State Overload, 9-45 AMP, Stand Alone
XTOE100GCSS	Solid State Overload, 20-100 AMP, Stand Alone

This Control Quick Selection Guide shows commonly used, in-stock items. Additional configurations for all items shown are available.







The XT Line of IEC Power Control, consisting of contactors, overload relays, mini controls, manual motor protectors and combination style starters, is one of the world's newest and most complete IEC Power Control product lines on the market.

The XT line applies new technology and design to help OEMs address five basic needs:

- Improving production
- Lowering material cost
- Improving performance
- Improving usability
- Improving safety



Manual Motor Protectors



Rotary Starters

Part Number	Description
XTPR001BC1	MMP Rotary Frame B .63 - 1A 1/2HP @480V
XTPR1P6BC1	MMP Rotary Frame B 1 - 1.6A 3/3HP @480V
XTPR2P5BC1	MMP Rotary Frame B 1.6 - 2.6A 1HP @ 480V
XTOR004BC1	MMP Rotary Frame B 2.5 - 4A 2HP@480V
XTPR6P3BC1	MMP Rotary Frame B 4 - 6.3A 3HP @480V
XTPR010BC1	MMP Rotary Frame B 6.3A- 10A 7-1/2HP @ 480V
XTPR016BC1	MMP Rotary Frame B 10-16A 10HP @480V
XTPR020BC1	MMP Rotary Frame B 16-20A 10HP @480V
XTPR025BC1	MMP Rotary Frame B 20-25A 15HP @480V
XTPR032BC1	MMP Rotary Frame B 25-32A 25HP @480V
XTPR040DC1	MMP Rotary Frame D 32-40A 30HP @480V

Accessories

Part Number	Description
XTPAXLSA	MMP Accessory Line Side Adapter
XTPAXFA11	MMP Accessory Front Auxiliary Contact Sequence A 1NO1NC
XTPAXSA11	MMP Accessory Side Auxiliary Contact 1NO1NC
XTPAXSA21	MMP Accessory Side Auxiliary Contact 2NO1NC
XTPAXENCSEM65RY	MMP Enclosure (NEMA 1, 12, 3R, Red & Yellow Handle) for XTPR
ХТРАХТРСВ	Combo Connection Kit - B Frame

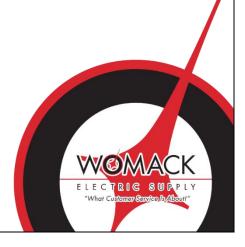
Eaton XT IEC Power Control Family

XT Series - Electronic Manual Motor Protectors and Electronic Motor Starters

Family Highlights:

- Electronic coil controller allows contactors to reduce power consumption and generate less heat, resulting in lower cooling requirements, the ability to mount more contactors/starters per cabinet, and an extended life on pilot devices that carry control signals.
- AC and DC devices with the same dimensions achieved with an electronically controlled coil system allow for space savings and reduced engineering design time
- Wiring is not required, therefore increasing installation and maintenance efficiency.
- Twin terminals with separate sockets in contactors up to 400A offer installation and application flexibility when using different size wires. The improved integrity of the connections reduces cabling faults.





NEMA Starters with Solid State Overloads



Part Number	Description	HP @ 480V
AN19BN0A5E005	SZ 0 AN19 FVNR Starter w/ C440 (1-5A) Electronic OL, 120V Coil	1/2-3HP
AN19DN0A5E020	SZ 1 AN19 FVNR Starter w/ C440 (4-20A) Electronic OL, 120V Coil	5-10HP
AN19GN0A5E045	SZ 2 AN19 FVNR Starter w/ C440 (9-45A) Electronic OL, 120V Coil	10-25HP
AN19KN0A5E100	SZ 3 AN19 FVNR Starter w/ C440 (20-100A) Electronic OL, 120V Coil	25-50HP
AN19NN0A5E140	SZ 4 AN19 FVNR Starter w/ C440 (28-140A) Electronic OL, 120V Coil	25-100HP

Accessories

Part Number	Description	NEMA Size
C320KGS4	Side Mounted AUX Contact Block 1NO/1NC	00-2
9-2875-3	Replacement Coil - 480V For 00	00
9-2876-3	Replacement Coil - 480V For 0	0
9-2703-3	Replacement Coil - 480V For Size 1	1

Replacement SS Overloads - C441

Part Number	Description	NEMA Size
XTOE005CCS	1-5 AMP NEMA 0/1	0/1
XTOE020CCS	4-20 AMP NEMA 1	1
XTOE045CCS	9-45 AMP NEMA 2	2
XTOE100DCS	20-100 AMP NEMA 3	3
XTOE175GCS	35-175 AMP NEMA 4	4

Replacement SS Overloads – C440 – SAME AS IEC!!!

NEMA Starter Solutions - Reliable, accurate, intelligent motor protection

Eaton's Freedom NEMA AN19 starter series combines exceptional Freedom contactor ratings with the C440 electronic overload's superior motor protection features.

AN19 starters can be monitored in real-time over communications, allowing for reduced troubleshooting efforts and downtime.

Benefits

- Ease of use
- Compact design
- Real-time accuracy
- Open and enclosed offerings













Variable Frequency Drives



Input 480V 3 Phase Out 480V 3 Phase

Part Number	Description	HP	Α
DG1-344D3FB-C21C	Eaton DG1 Variable Frequency Drive	2	4.3
DG1-347D6FB-C21C	Eaton DG1 Variable Frequency Drive	5	7.6
DG1-34016FB-C21C	Eaton DG1 Variable Frequency Drive	10	16
DG1-34023FB-C21C	Eaton DG1 Variable Frequency Drive	15	23
DG1-34031FB-C21C	Eaton DG1 Variable Frequency Drive	20	31

Kits and Accessories

Part Number	Description
DXG-KEY-RMTKIT	REMOTE KEYPAD MOUNTING KIT
DXG-ACC-FR2N12KIT	NEMA 1 Kit for Frame MI-2
DXG-ACC-FR3N12KIT	NEMA 1 Kit for Frame MI-3
DXG-ACC-SOFTWARE	Software Kit: (Software, Cable, Manual)

PowerXL DG1 General Purpose Variable Frequency Drives

Eaton's PowerXL DG1 general purpose, variable frequency drives are engineered for today's demanding commercial and industrial applications. With an industry leading energy efficiency algorithm, high short-circuit current rating and robust design, the DG1 offers customers increased efficiency, safety and reliability.

Core Features

- Ease of use: Easy Startup Wizard, PC Tool software, four built-in applications, diagnostics, local/remote button, removable keypad with copy/paste functionality
- Space-savings: Compact size, open Type 12 option, on-board communication and I/O
- Energy Optimization: Active energy control algorithm, 5% DC choke, input surge protection, EMI/RFI filter built-in
- Certifications: UL, CE, cUL, RoHS, C-Tick







Variable Frequency Drives



GA500 AC Microdrive (Applications: Conveyors, Pumps, Fans) (Click to Learn More)

					240V I	Models				48	80V Mod	els	
Power Output (HP)		Single-Phase			Three-Phase			Three-Phase					
Normal	Heavy	Catalog Code	Outpu	t Amps	Frame	Catalog Code	Output	Amps	Frame	Catalog Code	Outpu	t Amps	Frame
Duty	Duty	Catalog Code	ND	HD	Traine	Catalog Code	ND	HD	Traine	Catalog Code	ND	HD	Traine
1/6	1/6	GA50UB001ABA	1.2	0.8	1.1	GA50U2001ABA	1.2	0.8	1.1				1
1/4	1/4	GA50UB002ABA	1.9	1.6	1.1	GA50U2002ABA	1.9	1.6	1.1				
1/2	1/2									GA50U4001ABA	1.2	1.2	2.1
3/4	1/2	GA50UB004ABA	3.5	3	1.3	GA50U2004ABA	3.5	3	1.2				
1	3/4									GA50U4002ABA	2.1	1.8	2.2
1.5	1	GA50UB006ABA	6	5	2.4	GA50U2006ABA	6	5	1.4				
2	2									GA50U4004ABA	4.1	3.4	2.4
3	2	GA50UB010ABA	9.6	8	2.5	GA50U2010ABA	9.6	8	2.3				
3	3	GA50UB012ABA	12.2	11	3.2					GA50U4005ABA	5.4	4.8	2.5
4	3					GA50U2012ABA	12.2	11	2.4	GA50U4007ABA	7.1	5.6	2.5
5	4									GA50U4009ABA	8.9	7.3	2.5
N/A	5	GA50UB018ABA	N/A	17.6	4								
7.5	5					GA50U2021ABA	21	17	3.1	GA50U4012ABA	11.9	9.2	3.1
10	7.5					GA50U2030ABA	30	25	5				
10	10									GA50U4018ABA	17.5	14.8	5
15	10					GA50U2042ABA	42	33	5	GA50U4023ABA	23.4	18	5
20	20					GA50U2070ABA	70	60	7	GA50U4031ABA	31	24	6
25	20					GA50U2082ABA	82	75	7	GA50U4038ABA	38	31	6
30	25									GA50U4044ABA	44	39	8
40	30									GA50U4060ABA	60	45	8

Popular Options (More Found in Catalog)						
Ethernet/IP Card	SI-EN3	N1 Kits	See Catalog for Listing	Full Feature Keypad	JVOP-KPLCA04MEB	
Profibus-DP Card	SI-P3	Din Rail Kits	See Catalog for Listing	Keypad Adaptor Kit	JVOP-KPLCC04MBB	
Profinet Card	SI-EP3			Remote Mount Kit- Standard Keypad	ZPBA-GA500	
Option Card Carrier	JOHB-GA50			Remote Mount Cable-1M	UWR0051	

EASILY HANDLE ANY APPLICATION.





240 VAC, Single-Phase: 1/6 - 5 HP 240 VAC, Three-Phase: 1/6 - 30 HP

Questions to consider...

What is the application?

Constant Torque Applications (Conveyors, loaders, etc.) require a suitable drive (GA500 OR GA800). Variable torque loads (fans and centrifugal pumps) can be controlled with either CT Drives or specialized Fan/Pump Drives (P1000 on opposite side).

What are your Full Load Amps?

Check motor nameplate to make sure voltages and full load amps (FLA) are known. Pick next larger size drive as compared to FLA.

How/Where is the drive being mounted?

There are a lot of options to mount inside and enclosure, or as a stand-alone controller. NEMA 1 Kits are available, as well as configured drives in NEMA 1, NEMA 12 or NEMA 3R Enclosures.

How is the Drive being communicated with?

If using a PLC to start and stop the drive, make sure to choose the proper communication card (i.e., Ethernet IP).

Free Software! www.yaskawa.com

Free Technical Support! 1-800-Yaskawa

Free Training! Check with your local Sales

Legacy Micro-Drive Products

(Still Available)

J1000

AC Micro-Drive

Ranges:

1/8 to 7-1/2HP 230V, 460V.

Applications:

Simple fans & centrifugal pumps to 7-1/2 HP.

Accessories Available:

NEMA 1 end cap.

Notes: Older model. Economical for OEMS.

(Click to Learn More)

V1000-4X AC Micro-Drive in 4X

Enclosure

Ranges:

1/8 to 25HP 230V, 460V.

Applications:

Food processing, wash-down areas.

Accessories Available:

No configuration needed.

Serial and ethernet comms.

Notes:

Current-Wet or dusty environments Off the shelf as complete.

(Click to Learn More)





Variable Frequency Drives



GA800 AC Industrial Drive (Applications: Conveyors, Pumps, Fans, Closed Loop Systems, or Any Application!) (Click to Learn More)

Power Out	Power Output (HP)		240V Model	s			480V Mode	ls	
Name of District	Haara Duba	Catalan Cada	Output /	Amps	F	Catalan Cada	Output	Amps	F
Normal Duty	Heavy Duty	Catalog Code	ND	HD	Frame	Catalog Code	ND	HD	Frame
1	3/4	GA80U2004ABM	4.2	3.5	1	GA80U4002ABM	2.1	1.8	1
1.5	1	GA80U2006ABM	6	5	1				
2	1.5	GA80U2008ABM	8	6.9	1	GA80U4004ABM	4.1	3.4	1
3	2	GA80U2010ABM	9.6	8	1	GA80U4005ABM	5.4	4.8	1
4	3	GA80U2012ABM	12.2	11	1	GA80U4007ABM	7.1	6.5	1.5
5	4	GA80U2018ABM	17.5	14	1.5	GA80U4009ABM	8.9	7.2	1.5
7.5	5	GA80U2021ABM	21	17.5	1.5	GA80U4012ABM	11.9	9.2	1.5
10	7.5	GA80U2030ABM	30	25	1.5	GA80U4018ABM	17.5	14.8	1.5
15	10	GA80U2042ABM	42	33	1.5	GA80U4023ABM	23.4	18	1.5
20	15	GA80U2056ABM	56	47	2	GA80U4031ABM	31	24	2
25	20	GA80U2070ABM	70	60	3	GA80U4038ABM	38	31	2
30	25	GA80U2082ABM	82	75	3	GA80U4044ABM	44	39	3
40	30	GA80U2110ABM	110	88	4	GA80U4060ABM	59.6	45	3.5
50	40	GA80U2138ABM	138	115	6	GA80U4075ABM	74.9	60	4
60	50	GA80U2169ABM	169	145	7	GA80U4089ABM	89.2	75	6
75	60	GA80U2211ABM	211	180	7	GA80U4103ABM	103	91	6
100	75	GA80U2257ABM	257	215	9	GA80U4140ABM	140	112	7
125	100	GA80U2313ABM	313	283	9	GA80U4168ABM	168	150	7
150	125	GA80U2360ABM	360	346	10	GA80U4208ABM	208	180	9
150	150	GA80U2415ABM	415	415	10				
200	150					GA80U4250ABM	250	216	9
250	200					GA80U4302ABM	302	260	9
300	250					GA80U4371ABM	371	304	10
350	300					GA80U4414ABM	414	371	10
400	350					GA80U4477ABM	477	414	11
450	400					GA80U4568ABM	568	477	11
500	450					GA80U4605ABM	675	605	11
600	500					GA80U4720ABM	720	605	11



Popular Options (More Found in Catalog)						
Communication Options	Keypad Options	NEMA 1 Type Adapters	Custom Configurations			
SI-EN3 EtherNet/IP	JVOP-KPLCC04MBB LCD KP with	900-192-121-001	• Installed in N1, 3R, or 12			
	Bluetooth	240V - 42A	Enclosure.			
SI-ES3 EtherCAT	900-192-933-001 Type 1 KP Panel	480V - 23A	 Circuit Breaker or Disconnect. 			
	Mount Kit		Cover Control.			
SI-EP3 Profinet	UWR0051 KP Rem Mount Cable - 1M	900-192-121-002	 Additional Line Reactors. 			
		240V 56A,	 Flange Mounted Heat Sink. 			
SI-P3 Profibus-DP		480V 31-38A				
SI-N3 DeviceNet			1			

Choose YASKAWA and Get Connected!

Whether you prefer discrete / analog control or high-speed communication, GA800 covers all your needs for control interface and provides robust connections on all major networks.

Additional YASKAWA Drive Families

P1000 Variable Torque-Pump and Fan Drive

RANGES: 1 - 1000HP 230V, 460V, 575V, Configured NEMA 1, 12 or 3R Panels, Configured By-Pass.

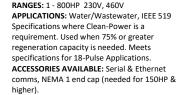


APPLICATIONS: Variable Torque Applications, Fans & centrifugal pumps only. Can be used in HVAC apps.

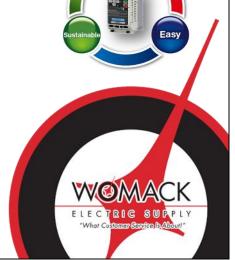
ACCESSORIES AVAILABLE: NEMA 1 end cap (needed for 150HP & higher), Serial & Ethernet comms.

(Click Here to Learn More)

U1000 Matrix Drive-IEEE 519 Compliant for Clean Power



(Click Here to Learn More)



Relays & Smart Relays



Eaton's easyE4 control relay allows for control systems that are efficient, flexible, and easy to implement.

Part Number	Description
EASY-E4-UC-12RC1	24V DC/AC 4 IN, 4 Analog Out, 4 Relay Out
EASY-E4-AC-12RC1	120V AC, 8 Digital In, 4 Relay Out
EASY-E4-UC-8RE1	24V DC Expander Module8IO
EASY-E4-UC-16RE1	24V DC Expander Module 16 IO
EASY-E4-AC-8RE1	120V AC Expander Module 8 IO
EASY-BOX-E4-UC1	Starter Kit (Base Unit Plus Software)
EASYSOFT-SWLIC	Software



TRL Series Multi-Function Timing Relays

Features time adjustment from 50 milliseconds up to 100 hours. Outgoing change-over contact rated 8 amps/250V. Flexible voltage supply and control input: 12V - 240Vac/dc for TRL07 and 24V - 240Vac/dc for TRL04.

Function	Part # TRL04	Part # TRL07
ON DELAY (Voltage Controlled)	Х	X
OFF Delay (w/Control Input)	Х	Х
Single Shot Leading Edge		Х
Single Shot Trailing Edge		X
ON DELAY (w/Control Input)		X
Single Shot Leading Edge (Voltage)	Х	X
Symmetric Pulse Generator	X	Х



Idec Relays

Part Number	Description
RH1BUL24VDC	Relay, 1P, 10A, 24VDC Coil
RH1BUL24VAC	Relay, 1P, 10A, 24VAC Coil
RH1BUL120VAC	Relay, 1P, 10A, 120VAC Coil
RH2BUL24VDC	Relay, 2P, 10A, 24VDC Coil
RH2BUL24VAC	Relay, 2P, 10A, 24ADC Coil
RH2BUL120VAC	Relay, 2P, 10A, 120VAC Coil
RH3BUL120VAC	Relay, 3P, 10A, 120VAC Coil
RH3BUL24VDC	Relay, 3P, 10A, 24VDC Coil
RH4BUL24VDC	Relay, 4P, 10A, 24VDC Coil
RH4BUL120VAC	Relay, 4P, 10A, 120VAC Coil



Think Automation and beyond...



Idec Bases

Part Number	Description
SH1B05	Base for 1 Pole Relay
SH2B05	Base for 2 Pole Relay
SH3B05	Base for 3 Pole Relay
SH4B05	Base for 4 Pole Relay



Voltage Management

Power Supplies

PSG Series - Single Phase 85-264V AC Input, 24V DC Output

Part Number	Description
PSG60E24RM	2.5A Output, 60W
PSG120E24RM	5A Output, 120W
PSG240E24RM	10A Output, 240W
PSG480E24RM	20A Output, 480W

PSL- Economy Series - Single Phase 100-240V AC Input, 24V DC Output

Part Number	Description
PSL30E24RP	1.25A Output, 30W
PSL60E24RP	2.5A Output 60W

PSG Series - Three Phase 400-500V AC Input, 24V DC Output

rad acites - Tillee	rod Series - Tillee Filase 400-500V Ac Iliput, 24V DC Output				
Part Number	Description				
PSG60F24RM	2.5A Output				
PSG120F24RM	5A Output				
PSG240F24RM	10A Output				
PSG480F24RM	20A Output				
PSG960F24RM	40A Output				



F1T•N

PSG Series Power Supplies

The PSG Series is a line of general-purpose power supplies for use in a wide variety of industrial control applications. Applications include communication networks, sensors, PLCs, and many other electrical systems.

Control Transformers

Primary 240 X 480VAC - Secondary 120VAC

Part Number	VA	Description
C0050E2AFB	50	Transformer with Primary and Secondary Fuse Blocks
C0100E2AFB	100	Transformer with Primary and Secondary Fuse Blocks
C0250E2AFB	250	Transformer with Primary and Secondary Fuse Blocks
C0350E2AFB	350	Transformer with Primary and Secondary Fuse Blocks
C0500E2AFB	500	Transformer with Primary and Secondary Fuse Blocks

Primary 240/480VAC - Secondary 24VAC

Part Number	VA	Description
C0075E2BFB	75	Transformer with Primary and Secondary Fuse Blocks
C0100E2BFB	100	Transformer with Primary and Secondary Fuse Blocks

Industrial Control Transformers Features

- Epoxy encapsulated coils
- Molded-in terminals
- 55° C rise, Class 105 insulation system

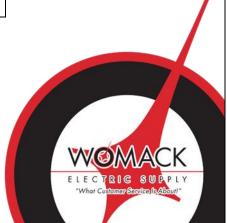
- Copper magnet wire

UL Listed, CSA Certified

• Isolates control circuits

• 50/60 Hz





Panel Components with Cage-Clamp™ Technology

Terminal Blocks 22-12 AWG, 600V, 20A

Part Numbers	Connection Type	Description
2002-1201	Cage Clamp	2-Conductor Through Gray
2002-1207	Cage Clamp	2-Conductor Ground Green/Yellow
2002-1301	Cage Clamp	3-Conductor Through Gray
2002-1401	Cage Clamp	4-Conductor Through Gray
2002-1407	Cage Clamp	4-Conductor Ground Green/Yellow
2202-1201	Push Button	2-Conductor Through Gray
2202-1207	Push Button	2-Conductor Ground Green/Yellow
2202-1301	Push Button	3-Conductor Through Gray
2202-1401	Push Button	4-Conductor Through Gray

W/AGO



As the world leader in spring pressure connection technology, WAGO offers the perfect connection system to meet your specific needs.

Terminal Block Accessories

Part Numbers	For Use With	Description
2002-1292	2002/2200-12XX Series	End And Intermediate- Orange
2002-1392	2002/2200-13XX Series	End And Intermediate- Orange
2002-1492	2002/2200-14XX Series	End And Intermediate- Orange
2002-402	All 2002/2200 Series	Push-In Type Jumper 2-Pos
2002-404	All 2002/2200 Series	Push-In Type Jumper 4-Pos
2002-410	All 2002/2200 Series	Push-In Type Jumper 10-Pos
249-116	All 2002/2200 Series	Screw-less End Stop
2002-1393	2002/2202 13XX Series	Separator Plate 2MM Gray
2002-1493	2002/2200-14XX Series	Separator Plate 2MM- Gray
2002-1494	2002/2200-14XX Series	Separator Plate 2MM- Orange
2009-182	All 2002/2200 Series	Testing Tap For Max
793-5502	All 2002/2200 Series	WMB Marking Card White 111
793-5503	All 2002/2200 Series	WMB Marking Card White 1121
793-5504	All 2002/2200 Series	WMB Marking Card White 2131
XBANS3575P	All 2002/2200 Series	Eaton Din Rail- Steel Slotted 2M

Power Supplies

787-7121-Phase,
24VDC/2.5A Output



787-722

1-Phase, 24VDC/5A Output

Fuse Blocks For 5 X 20 MM Fuse

Part Numbers	Connection Type	Description
2002-1611	Cage Clamp	2-Conductor Fuse
2002-991	Cage Clamp	End Plate For Fuse

Convenience Outlets -

DIN RAIL

510-17643

15A Duplex Receptacle, DIN Rail Mountable



15A Duplex GFI, DIN Rail Mountable

This Control Quick Selection Guide shows commonly used, instock items. Additional configurations for all items

Relays

Part Numbers	Description
857-304	Relay Changeover Contact, 24VDC input, 6A 250V
857-357	Relay Changeover Contact, 120V AC/DC input, 6A 250V

Ethernet Switches - Unmanaged

Part Numbers	Description
852-111	5-Port Ethernet Switch, 10/100
852-112	8-Port Ethernet Switch, 10/100



Terminal & Distribution Blocks

6.2MM, 10G, Screw Connection, Through Feed, Single Level

Part Number	Description
XBUT4	Grey
XBUT4BU	Blue
XBUT4OR	Orange
XBUT4BK	Black
XBUT4PE	Green Ground Block
XBUT4FBE	Fuse Block for 5X20MM Fuse

6.2MM, 10G, Spring Cage, Through Feed, Single Level

Part Number	Description
XBPT4	Grey
XBATPT4	Partition Plate

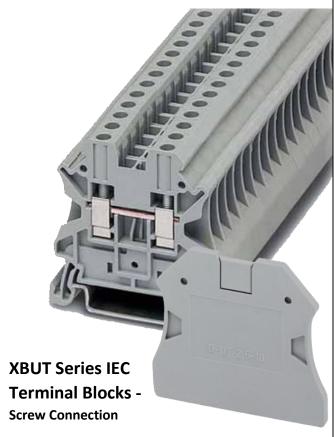
6.2MM, 10G, Screw Connection, Through Feed, Double Level

Part Number	Description
XBUTT4	Grey Double Level
XBUTT4PE	Ground Block Double Level

Accessories

Part Number	Description
XBACUT10	End Cover
XBATUT10	Partition Plate
XBAFBS26	Plug In Bridge - 2 Pole
XBAFBS36	Plug In Bridge - 3 Pole
XBAFBS56	Plug In Bridge - 5 Pole
XBAFBS106	Plug In Bridge - 10 Pole
XBATSPAI4	Test Adapter
XBMZB6	Blank Marker Strip
XBAES35C	End Stop, One Screw Mount
XBAES35N	End Stop, Snap On
XBANS3575P	35MM DIN Rail, Slotted 1M





FAT-N

Key Features:

- Maintenance-free connections
- Global acceptance
- Multi-conductor connections
- Flexible plug-in bridge system
- Large surface area for marking
- Standardized testing system
- Metal parts made of tin-plated copper

This Control Quick Selection Guide shows commonly used, in-stock items. Additional configurations for all items shown are available.

Part Number	Description
UD80A	80A 1 Pole Distribution Block – 1in (#4Ga), 6 Out (#4 to #16)
UDJ160A	160A 1 Pole Distribution Block – 1 in (3/0), 6 Out (#4 to #14)
UD250A	250A 1 Pole Distribution Block – 1in (250MCM), 11 Out (#1)

nVent ERIFLEX Single Pole Distribution Block Features

- Tinned CU or AL block allows for CU/AL direct connections, or using ferrule
- Design allows for visual inspection of conductor and confirmation of connection
- Modular snap-together blocks for building multi-pole power blocks
- Easily clips onto DIN rail or mounts to panel with screws
- 95% fill ratio





Molded Case Industrial Circuit Breakers



Power Defense Breakers

Part Number	Description
PDG-1-3-C-0015-TFFJ	15A 600V 3P 18KAIC Breaker
PDG-1-3-C-0020-TFFJ	20A 600V 3P 18KAIC Breaker
PDG-1-3-C-0030-TFFJ	30A 600V 3P 18KAIC Breaker
PDG-1-3-C-0060-TFFJ	60A 600V 3P 18KAIC Breaker
PDG-1-3-C-0100-TFFJ	100A 600V 3P 18KAIC Breaker

Accessories

Part Number	Description	
PDG1X3TA1256W	Multi-wire Terminal 6 Wire	
PDG1XHMDE	Handle and Mechanism (Shaft Separate)	
PDG12XHMS307	12' Shaft	

GLOBAL

IEC / CCC / UL / CSA

Power Defense









A globally rated platform from Eaton.

The Power Defense Molded Case Circuit Breaker portfolio is globally rated in a small footprint for easy adaptability no matter the application or project requirement. A circuit breaker with communicating electronic trip units and the ability to generate the data to help you optimize your facilities' performance, and to help keep your employees, customers and end-users safe by reducing the risk of arc flash events.

Explore the features and functionalities of Eaton's globally rated molded case circuit breaker platform.

You will be able to:

- Increase equipment uptime
- Reduce the effort and costs involved with servicing or replacing equipment
- Predict potential points of failure with advances in trip unit
- View data directly from the breaker that helps you determine breaker health
- Improve system reliability
- Best use data available to you to reduce maintenance cost and increase safety



Rotary Disconnects



Non-Fused Switches

Part Number	Description
R5A3016U	16 AMP 3P Non Fused Disc Switch UL 508
R5A3030U	30 AMP 3P Non Fused Disc Switch UL 508
R5A3040U	40 AMP 3P Non Fused Disc Switch UL 508
R5A3080U	80 AMP 3P Non Fused Disc Switch UL 508

Handles

Part Number	Description
SHB00N12	Black Door Handle
SHR00N12	Red Door Handle

Shafts

Part Number	Description
SF150SH5X5	5.9 Inch Shaft
SF320SH5X5	12.6 Inch Shaft

Accessories

Part Number	Description	
TS3R5A	3 Pole Terminal Shroud	
AC1NONC	1 NO/ 1 NC Aux Contact	

Fused Switches

Part Number	Description		
R9I3030FCC	Fusible Disconnect Switch 30A Class CC		
R9J3060FJ	Fusible Disconnect Switch 60A Class J		

Handles

Part Number	Description
SHRON12HV	Red Door Handle

Shafts

Part Number	Description
SF200SH5X5H	7.9 Inch Shaft

Accessories

Part Number	Description
AC1NOR9	1 NO Aux Contact







Eaton's full-range of rotary disconnects offers a compact, economical, and high- quality choice for switching and isolation spanning a range from 16A - 1200A.

The R5 Series of switches are UL 508 listed devices, suitable for use as motor disconnects. The R9 offering consists of UL 98 listed fusible and non-fusible products that may be used for service entrance, or anywhere a local means of disconnect is needed or required.

R5 Product Description:

R5 Series (UL 508 listed) products are manually operated modular switches. Load break switching and isolation provide safety solutions for any low voltage circuit, particularly for machine and control circuits. The R5 Series products are manual motor controllers suitable as motor disconnect.

R9 Product Description:

R9 Series (UL98 listed) Fusible 30–800A manual operated multi-pole fusible disconnect switches use double break contacts per pole that ensure complete isolation of the fuse when the switch is in the OFF position. When installed with fuses, they provide protection for low voltage electrical installations against short circuit and overload.





UL 489 Mini DIN Breakers



Part Number	Description
FAZ-C1/1-NA-SP	1A C Curve 1 Pole
FAZ-C1.5/1-NA-SP	1.5A C Curve 1 Pole
FAZ-C3/1-NA-SP	3A C Curve 1 Pole
FAZ-C5/1-NA-SP	5A C Curve 1 Pole
FAZ-C8/1-NA-SP	8A C Curve 1 Pole
FAZ-C10/1-NA-SP	10A C Curve 1 Pole
FAZ-C15/1-NA-SP	15A C Curve 1 Pole
FAZ-C20/1-NA-SP	20A C Curve 1 Pole
FAZ-C1/2-NA	1A C Curve 2 Pole
FAZ-C5/2-NA	5A C Curve 2 Pole
FAZ-C7/2-NA	7A C Curve 2 Pole
FAZ-C10/2-NA	10A C Curve 2 Pole
FAZ-C15/2-NA	15A C Curve 2 Pole
FAZ-C1/3-NA	1A C Curve 3 Pole
FAZ-C7/3-NA	7A C Curve 3 Pole
FAZ-C10/3-NA	10A C Curve 3 Pole
FAZ-C15/3-NA	15A C Curve 3 Pole
FAZ-C20/3-NA	20A C Curve 3 Pole
FAZ-C25/3-NA	25A C Curve 3 Pole
FAZ-C30/3-NA	30A C Curve 3 Pole
FAZ-C40/3-NA	40A C Curve 3 Pole



Optimum product quality, tested reliability and safety stand for best protection of personnel, installations and plant.

Eaton's FAZ-NA DIN rail mountable circuit breaker is designed for use in branch service applications.

The Curve type (B, C, D, etc...) designates the instantaneous trip current range, or the amount of ...

- B Curve: Trips above 3 Times In Up To 5 times In
- C Curve: Trips above 5 Times In Up To 10 Times In
- D Curve: Trips above 10 Times In Up To 20 Times In



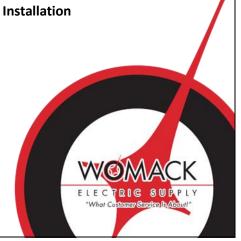
Edison Class CC Fuse Holders

Part Number	Description	
EHCC1DIU	1 Pole Class CC DIN Rail Fuse Holder w/Indicator	
EHCC2DIU	2 Pole Class CC DIN Rail Fuse Holder w/Indicator	
EHCC3DIU	3 Pole Class CC DIN Rail Fuse Holder w/Indicator	



Finger-Safe DIN-Rail Mount Fuse Holders Protect Your Electrical System & Simplify Installation

- High SCCR rated, UL Listed Class CC holder with indicator option for 600Vac/dc.
- UL Recognized midget and 10 x 38 holders.
- Terminals rated for use with 75°C or 90°C wire, fine stranded wire, spade terminals and comb-bus bars. Use any higher temperature rated wire with appropriate derating.
- Complete range of UL Listed and high SCCR rated 1- and 3-phase finger-safe comb-bus bars and power feed lugs.



Fuse Protection



Glass Fuses 5x20mm, 250V Fast Acting (For Use With Certain Terminal Blocks)				
GMA-500-R	GMA-2-R	GMA-4-R	GMA-7-R	GMA-15-R
GMA-1-R	GMA-3-R	GMA-5-R	GMA-10-R	

RK5 Fuses, 600V Time Delay (For Use In Class R Rotary Disconnects And Fuse Blocks)				
ECSR-2-1/2	ECSR-5	ECSR-12	ECSR-25	ECSR-40
ECSR-3	ECSR-6	ECSR-15	ECSR-30	ECSR-50
ECSR-4	ECSR-10	ECSR-20	ECSR-35	ECSR-60

Class CC 600V Time Delay (For Use With CC Fuse Holders)				
EDCC5	EDCC-2	EDCC-6	EDCC-10	EDCC-25
EDCC-1	EDCC-3	EDCC-7	EDCC-12	EDCC-30
EDCC-1.25	EDCC-4	EDCC-8	EDCC-15	
EDCC-1.4	EDCC-5	EDCC-9	EDCC-20	

Class CC 600V Fast Acting (For Use With CC Fuse Holders And ICT)				
HCLR5	HCLR-3	HCLR-6	HCLR-15	HCLR-30
HCLR-1	HCLR-5	HCLR-10	HCLR-20	

Class J 600V Time Delay				
JDL-2	JDL-15	JDL-30	JDL-45	JDL-80
JDL-6	JDL-20	JDL-35	JDL-50	JDL-100
JDL-10	JDL-25	JDL-40	JDL-60	JDL-125

Fuse Blocks	
RM60030-3CR	30A, 600V 3P, Class R, Fuse Block
RM60060-3CR	60A, 600V, 3P, Class R, Fuse Block
JM60030-3CR	30A, 600V 3P, Class J, Fuse Block
JM60060-3CR	60A, 600V, 3P, Class J, Fuse Block

 $This \ Control \ Quick \ Selection \ Guide \ shows \ commonly \ used, \ in\text{-}stock \ items. \ Additional \ configurations for \ all \ items \ shown \ are \ available.$



The Edison brand provides the industry with a vast line of circuit protection products including electrical and electronic fuses, fuse holders, and power distribution blocks.









Wiring Duct & Accessories

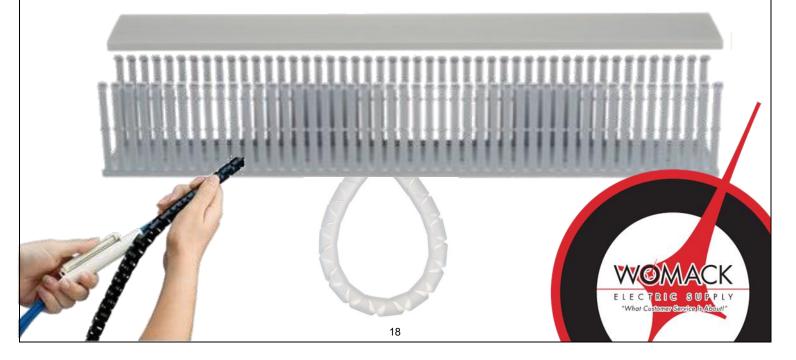


Part Number	Description
PW50F-T20	Pan-Wrap Split Harness Wrap 1/2", Black
PW75F-C20	Pan-Wrap Split Harness Wrap 3/4", Black
T38F-C	Spiral Wrap, 3/8", Natural
T50F-C	Spiral Wrap, 1/2", Natural
F1X2LG6	1" x 2" Slotted Wiring Duct, Light Gray
F1X3LG6	1" x 3" Slotted Wiring Duct, Light Gray
F1.5X3LG6	1.5" x 3" Slotted Wiring Duct, Light Gray
F2X2LG6	2" x 2" Slotted Wiring Duct, Light Gray
F2X3LG6	2" x 3" Slotted Wiring Duct, Light Gray
F2X4LG6	2" x 4" Slotted Wiring Duct, Light Gray
F3X3LG6	3" x 3" Slotted Wiring Duct, Light Gray
F3X4LG6	3" x 4" Slotted Wiring Duct, Light Gray
F4X4LG6	4" x 4" Slotted Wiring Duct, Light Gray
C1LG6	1" Wiring Duct Cover, Light Gray
C1.5LG6	1.5" Wiring Duct Cover, Light Gray
C2LG6	2" Wiring Duct Cover, Light Gray
C3LG6	3" Wiring Duct Cover, Light Gray
C4LG6	4" Wiring Duct Cover, Light Gray

* Wide Finger Duct Available

Panduit offers a wide variety of sizes, colors, and materials to meet your application's wire capacity needs and space constraints. This allows for reduced control panel footprints by utilizing unused 3D space within your control panels.

 $This \ Control \ Quick \ Selection \ Guide \ shows \ commonly \ used, in-stock \ items. \ Additional \ configurations for \ all \ items \ shown \ are \ available.$



Wire Terminals and Ferules



Part Number	Description
BSN10-L	Butt Splice Nylon Insulated 12-10AWG PK50
BSN14-C	Butt Splice Nylon Insulated 16-14AWG PK100
BSN18-C	Butt Splice Nylon Insulated 22-18AWG PK100
PN10-10F-L	Fork Nylon Insulated 12-10AWG #10 PK50
PN10-8F-L	Fork Nylon Insulated 12-10AWG #8 PK50
PN10-14F-L	Fork Nylon Insulated 12-10AWG 1/4" PK50
PN14-10F-C	Fork Nylon Insulated 18-14AWG #10 PK100
PN14-6F-C	Fork Nylon Insulated 18-14AWG #6 PK100
PN14-8F-C	Fork Nylon Insulated 18-14AWG #8 PK100
PN18-10F-C	Fork Nylon Insulated 22-18AWG #10 PK100
PN18-6F-C	Fork Nylon Insulated 22-18AWG #6 Stud PK100
PN18-8F-C	Fork Nylon Insulated 22-18AWG #8 Stud PK100
PN14-10R-C	Ring Nylon 18-14AWG #10 Stud PK100
PN14-6R-C	Ring Nylon 18-14AWG #6 Stud PK100
PN14-8R-C	Ring Nylon 18-14AWG #8 Stud PK100
PN18-10R-C	Ring Nylon 22-18AWG #10 Stud PK100
PN18-6R-C	Ring Nylon 22-18AWG #6 Stud PK100
PN18-8R-C	Ring Nylon 22-18AWG #8 Stud PK100
PN10-10R-L	Ring Nylon Insulated 12-10AWG #10 PK50
PN10-8R-L	Ring Nylon Insulated 12-10AWG #8 Stud PK50
PN10-14R-L	Ring Nylon Insulated 12-10AWG 1/4" Stud PK50

Insulated Ferules

Part Number	Description
FSD75-8-D	Ferrule 20AWG
FSD76-8-D	Ferrule 18AWG
FSD78-8-D	Ferrule 16AWG
FSD80-8-D	Ferrule 14AWG
FSD81-12-C	Ferrule 12AWG
FSD82-12-C	Ferrule 10AWG
FSD83-12-C	Ferrule 8AWG

Crimp Tool

Part Number	Description
CT-1000	Ferrule Crimp Tool



 ${\it Additional\ configurations\ for\ all\ items\ shown\ are\ available}.$





Enclosures & Accessories



Hoffman CONCEPT SERIES NEMA 4/12

Part Number	Dimensions (H" x W" x D")	Back Panel Needed
CSD16126	16" X 12" X 6"	CP1612
CSD20168	20" X 16" X 8"	CP2016
CSD24208	24" X 20" X 8"	CP2420
CSD30248	30" X 24" X 8"	CP3024
CSD30308	30" X 30" X 8"	CP3030
CSD363612	36" X 36" X 12"	SP3636

Continuous Hinge with Clamps, Type 12

Part Number	Dimensions (H" x W" x D")	Back Panel Needed
A6044CH	6" X 4" X 4"	A6P4
A8066CH	8" X 6" X 6"	A8P6
A1008CH	10" X 8" X 4"	A10P8
A10086CH	10" X 8" X 6"	A10P8
A10106CH	10" X 10" X 6"	A10P10
A1210CH	12" X 10" X 6"	A12P10
A1212CH	12" X 12" X 6"	A12P12
A1412CH	14" X 12" X 6"	A14P12
A1614CH	16" X 14" X 6"	A16P14
A202006LP	20" X 20" X 6"	A20P20
A242408LP	24" X 24" X 8"	A24P24
A363608LP	36" X 36" X 8"	A36P36

Accessories

Part Number	Description
A4AXFN	Compact Axial Fan 4" 120V

CSD Series Applications:

CSD Series Concept Enclosures are ideal for machine control applications. With streamlined styling, flush quarter-turn latches and an attractive, durable finish.

A Series Applications:

For applications requiring a bright white interior to increase control visibility, this enclosure includes a padlocking hasp and staple for security and screw-down clamps for secure closure.

Specifications:

- 16- & 14-gauge steel
- Smooth welded seams
- External formed body flanges





HMI (Human Machine Interface) High Performance Touchscreens



Think Automation and beyond...

15" Screen 12.1" Screen

10.4" Screen

8.4" Screen

5.7" Screen

Touchscreen Part Numbers

Touchscreen Fait Numbers	
Part Number	Description
HG5G-VFXT22MF-B	15-Inch Color TFT LCD Display Black Bezel with
HG3G-VFX122IVIF-B	Multimedia Function
HG4G-VCXT22MF-B	12.1-Inch Color TFT LCD Display Black Bezel with
TIG4G-VCXT2ZIVII-B	Multimedia Function
HG3G-VAXT22MF-W	10.4-Inch Color TFT LCD Display Light Gray Bezel with
TIGSG-VAXTZZIVII -VV	Multimedia Function
HG3G-VAXT22MF-B	10.4-Inch Color TFT LCD Display Black Bezel with
11030-VAX122IVII-B	Multimedia Function
HG3G-V8XT22MF-W	8.4-Inch Color TFT LCD Display Light Gray Bezel with
11030-7871221011-00	Multimedia Function
HG3G-V8XT22MF-B	8.4-Inch Color TFT LCD Display Black Bezel with
TIGSG-V8XT2ZIVII-B	Multimedia Function
HG2G-V5FT22TF-W	5.7-Inch Color TFT LCD Display Light Gray Bezel
11020-13112211-W	
HG2G-V5FT22TF-B	5.7-Inch Color TFT LCD display Black Bezel
11020 13112211-0	

The MicroSmart FC6A Plus

You can get ultimate performance using IDEC's MicroSmart FC6A Plus. Capable of controlling large machines or entire small-scale manufacturing facilities handling large programs with complex control requirements such as positioning, PID, flow totalization and recipes.



- Dual Ethernet Ports
- BACnet Protocol
- Modbus TCP/IP and RTU
- Fast Processing Speed
- Improved PID Algorithm
- Upgradable Firmware
- Expanded Memory
- Time-Base Applications
- Stepper Motion Control

PRODUCT DESCRIPTION

New Enhanced High-Performance Series: 5.7" to 15" displays

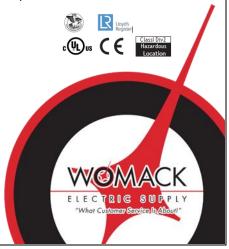
IDEC touchscreens are redefining Human Machine Interaction. Our new High Performance 5.7", 8.4", 10.4" and 12.1" HMIs offer upgraded features and with the addition of a new 15" model, users have options for applications on any size equipment.

Featuring up to 800 cd/m2 brightness, 1024 x 768 pixels high resolution displays, and over 100,000 hours of backlight life, they are the brightest, longest-lasting displays on the market.

An exceptionally wide operating temperature range of -20°C to +60°C as well as IP66F, IP67F, Type 4X, 12, 13, ABS Type Approval, LR Type Approval, and Class I Div 2 approval ratings, assures reliable operation in the toughest environments. These touchscreens are built for endurance and are backed by an industry leading threeyear warranty.

KEY FEATURES

- High Resolution Display: 1024 x 768 pixels (8.4", 10.4", 12.1", 15"), 640 x 480 pixels (5.7")
- Backlight life of 100,000 hours with up to 800 cd/m2
- Wide range of Operating Temperature: -20°C to +60°C
- Multiple Protocols up to 4 protocols simultaneously
- Remote Access, Monitor and Control Function
- FTP, Email, Mobile App and Custom Web Page
- Audio and Video Interface (8.4", 10.4", 12.1", 15")
- Supports Analog and Discrete I/O Expansion Modules
- IP66F/67F, Type 4X, 12 and 13, Class I Div 2
- 3 Year Warranty



22мм Operators

Pushbuttons

Part Number	Description
M22-DR-G	Green Flush Maintained Pushbutton (Field convertible to Momentary)
M22-DR-S	Black Flush Maintained Pushbutton (Field convertible to Momentary)
M22-DR-R	Red Flush Maintained Pushbutton (Field convertible to Momentary)
M22-DRH-R	Red Extended Momentary Pushbutton
M22-DL-G	Green Illuminated Pushbutton
M22-DL-R	Red Illuminated Pushbutton

Pilot Lights

Part Number	Description
M22-L-R	Red Indicating Light
M22-L-G	Green Indicating Light
M22-L-Y	Yellow Indicating Light
M22-L-B	Blue Indicating Light
M22-L-W	White Indicating Light
M22-LED-G	Green Front Mounted 12-30VAC/DC LED unit
M22-LED-R	Red Front Mounted 12-30VAC/DC LED Unit
M22-LED-W	White Front Mounted 12-30VAC/DC LED Unit
M22-LED230-G	Green Front Mounted 85-264VAC LED Unit
M22-LED230-W	White Front Mounted 85-264VAC LED Unit
M22-LED230-R	Red Front Mounted 85-264VAC LED Unit

E-Stops

Part Number	Description
M22-PV	Push-Pull E-Stop
M22-PVL	Red Illuminated E-Stop
M22-PVT	Twist-to-Release E-Stop

Selector Switches

Part Number	Description
M22-WK	Two Position Momentary Selector Switch
M22-WK3	Three Position Momentary Selector Switch
M22-WKV	Two Position Maintained Selector Switch
M22-WRK3	Three Position Maintained Selector Switch
M22-WRS	Two Position Maintained Selector Switch, Keyed
M22-WRS3	Three Position Maintained Selector Switch, Keyed

Contact Blocks

Part Number	Description
M22-K01	1NC Front Mounted Contact Block
M22-K10	1NO Front Mounted Contact Block
M22-KC01	1NC Base Mounted Contact Block
M22-KC10	1NO Base Mounted Contact Block

Enclosures

Part Number	Description
M22-I1-PG	One 22mm Element Enclosure
M22-I2-PG	Two 22mm Element Enclosure
M22-I3-PG	Three 22mm Element Enclosure

Miscellaneous Operators

Part Number	Description
M22-R4K7	Potentiometer, 4.7K
M22-R10K	Potentiometer, 10K
M22-DDLF-GR	Double Pushbutton, Green/Red Pushbuttons, Center Light

Accessories

Part Number	Description
M22S-R30	30mm to 22mm hole adapters
M22-B	Plug to Close Mounting Holes
M22-XD-SWRGYB	Flush Button Plate Pack (Black Red Green, Yellow, White, Blue
M22-USB-SA	Bulkhead Interface, USB Port
M22-RJ45-SA	Bulkhead Interface, RJ45 Port



Pushing the Boundaries of What's Possible...

Modular Design and Functionality

- Modular and flexible
- Plastic construction with silver, black and metal bezel options
- Stackable contact blocks
- Spring-cage terminal blocks
- Traditional contact elements (M22-K) and indicating lights (M22-LED) with 45mm depth



30мм Operators

Pushbuttons

Part Number	Description
10250T30G	Green Flush Momentary Pushbutton W/1NO 1 N/C
10250T31R	Red Extended Head Momentary Pushbutton W 1N/C 1N/O
10250T30B	Black Flush Momentary Pushbutton W 1 N/O 1 N/C
10250T33	Red Mushroom Emergency Stop with 1N/O 1N/C



Part Number	Description
10250T197LRP2A	Red Indicating Light 120V
10250T197LGP2A	Green Indicating Light 120V
10250T197LRP24	Red Indicating Light 24VDC
10250T197LGP24	Green Indicating Light 24VDC

E-Stops

Part Number	Description
10250T5B62-1X	Push-Pull E-Stop

Selector Switches

Part Number	Description	
10250T20KB	Two Position MAINT Selector Switch	
10250T21KB	Three Position MAINT Selector Switch	

Contact Blocks

Part Number	Description	
10250T51	1NC Contact Block	
10250T53	1NO Contact Block	
10250T1	1NO/1NC Contact Block	
10250T2	2NO Contact Block	
10250T3	2NC Contact Block	

Enclosures

Part Number	Description
E1PB	Hoffman 1 Hole Enclosure 30MM
E2PB	Hoffman 2 Hole Enclosure 30MM
E3PB	Hoffman 3 Hole Enclosure 30MM

Miscellaneous Operators

Part Number	Description
10250T338	Potentiometer, 5K
10250T333	Potentiometer, 10K



Largest breadth of functionality and only one piece metal housing operator in the industry.

Eaton's 10250T line of heavy-duty, water and oil-tight 30.5mm pushbuttons are an excellent choice for applications where reliability and durability are required.

The pushbuttons feature a heavy-duty zinc die-cast construction, and reliability nibs improve contact reliability even under dry circuit and fine dust conditions.

- 30.5mm
- NEMA Class 1 Division 2
- NEMA 4X Rated





Notification Products

FAT•N

Eaton SL7-70MM Stacklights

Continuous Light

Part Number	Voltage	Color
SL7-L24-R	24V AC/DC	Red
SL7-L24-G	24V AC/DC	Green
SL7-L24-A	24V AC/DC	Amber
SL7-L24-B	24V AC/DC	Blue
SL7-L120-R	110/120V AC	Red
SL7-L120-G	110/120V AC	Green
SL7-L120-A	110/120V AC	Amber
SL7-L120-B	110/120V AC	Blue

Flashing Light

Part Number	Voltage	Color
SL7-BL24-R	24V AC/DC	Red
SL7-BL24-G	24V AC/DC	Green
SL7-BL120-R	110/120V AC	Red
SL7-BL120-G	110/120V AC	Green

Acoustic Modules

Part Number	Voltage	Color
SL7-AP24	24V AC/DC	Black
SL7-AP120	110/120V AC	Black

Bases

Part Number	Description	
SL7-CB-100	100MM Black With Aluminum Tube And Black Base	
SL7-CB-T-100	100MM Black With M20 Threaded Base	





Horns

Part Number	Description	
450E-024	24v Electronic Horn, 4 X 4 Inches	
WB	Weatherproof Backing Box For 450, 350 Horns	
350-120-30	120V Mechanical Horn, 4 X 4 Inches	

This Control Quick Selection Guide shows commonly used, in-stock items. Additional configurations for all items shown are available.

Eaton's SL Series Stacklights

Attention-Grabbing Performance

- Tool Free Assembly
- Customizable Configurations
- Compliant with global performance standards
- Reliable audible and visual signaling







Sensor Solutions

ODATALOGIC

THE VISION IS YOURS





SR31 sensors fork with slot of 30mm width and 42 mmdepth is.



SRF line includes 30, 50, 80 and 120mm fork sensors



TL50 contrast sensor is mmended where a cost reduction...



high resolution, White LED...



line with RGB LED from basic



LD46 is equipped with 5 UV high power LED emi and high...



S65-V sensor offers space compact...



S65-W sensor offers space compact...



DS3 light arrays are used to objects...



DS2 light array is suggested



Sensors to Solve the **Toughest Applications**

- Limit Switches
- Inductive Sensors
- Proximity Switches
- Photo-Electric
- Ultra-Sonic
- Color Registration
- Flag Sensors
- Contrast Sensors
- Time-Of Flight
- Level
- Encoders
- Smart Sensors
- Arrays
- Fiber Optic

is a unique and very,



generation M18 sensor line



saving and the widest choice



with axial or radial optics,



short barrel, in plastic or.,



line offers through beam,,



SMALL SM-all LINE offers the smallest photoelectric



SM123 SERIES focus, SM2 ultra-flat

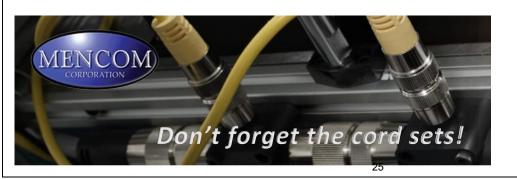


S100 The S100 Sensor basic line offers the most



S45 line offers LED and Laser sensors in standard





Safety Solutions

Optimum Safety Solutions for Every Application!

... from the Best Names in the Business



Safety Relays
Light Curtains
Safety Sensors
Safety Switches
Safety Scanners
Safety Gate Systems
Safety Controllers
Safety PLCs
... and More

This Control Quick Selection Guide shows commonly used, in-stock items. Additional configurations for all items shown are available.

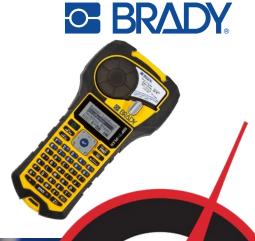
Labeling Solutions

Description

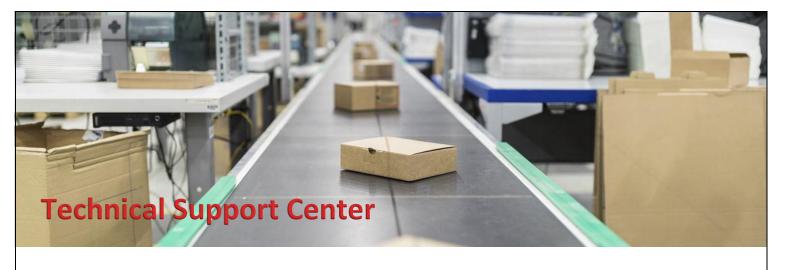
Printer

Part Number

BMP21-PLUS	Portable Label Printer		
Labels			
Part Number	Label Type	Color	Width Inches
M21-500-595-WT	Continuous Vinyl	Black on White	.50
M21-750-595-WT	Continuous Vinyl	Black on White	.75
M21-500-595-YL	Continuous Vinyl	Black on Yellow	.50
M21-750-595-YL	Continuous Vinyl	Black on Yellow	.75
M21-750-427	Self-Laminating	Black on White	.75
M21-500-499	Wire-Cable Wrap	Black on White	.50
M21-250-C-342	Heat Shrink	Black on White	.25







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Our Technical Support Center has experienced engineers who can assist you with your industrial automation and electrical control needs.

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- HMI & Industrial Computers
- Motor Control
- Variable Frequency Drives
- Industrial Networks
- Wireless Networks & I/O
- Sensors
- Machine Safeguarding
- Machine Wiring System
- Power Conditioning Devices
- Software

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Offers real-time customer assistance in finding the 'right' product or an alternative to your current manufacturer, pre-sale application support, post-sale product support, and troubleshooting. The Technical Support team is here to help.

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- Training
- Automation and Control Troubleshooting
- Cross Referencing and BOM Conversations
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