

E1 Plus Electronic Overload Relays

Catalog Number Explanation/Product Selection

193 – EE C B
a b c d

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a

Bulletin Number	
Code	Description
193	IEC Three-Phase
193S	IEC Single-Phase
592	NEMA Three-Phase
592S	NEMA Single-Phase

b

Type	
Code	Description
ED1*	Fixed Trip Class 10
EE	Selectable Trip Class

* Bulletin 193 overload relays only

c

Adjustment Range [A]			
Three-Phase		Single-Phase	
Code	Description	Code	Description
A	0.1...0.5	P	1.0...5.0
B	0.2...1.0	R	3.2...16
C	1.0...5.0	S	5.4...27
D	3.2...16	T	9...45
E	5.4...27	U	18...90
F	9...45	V	60...120
G	18...90	—	—
H	30...150	—	—
J	40...200	—	—
K	60...300	—	—
L	100...500	—	—
M	120...600	—	—
N	160...800	—	—

d

Bulletin 100 Contactor Size	
Code	Description
B	C09...C23
D	C30...C43
E	C60...C85, C60...C97
F	D95...D180, D115...D180
G	D210...D420
H	D630...D860
Bulletin 500 NEMA Contactor Size	
Code	Description
T	Size 00
C	Size 0...2
D	Size 3
Panel/DIN Rail Mount	
Code	Description
P	Integrated panel mount and pass-through wiring
Z	Panel mount with external current transformers

Product Selection

Bulletin 193-ED – Three-Phase Devices

- Fixed Trip Class 10
- Manual reset
- Screw-type control terminals

Mounts to Contactor	Adjustment Range [A]	Cat. No.
100-C09...100-C23	0.1...0.5	193-ED1AB
	0.2...1.0	193-ED1BB
	1.0...5.0	193-ED1CB
	3.2...16	193-ED1DB
	5.4...27	193-ED1EB
100-C30...100-C43	5.4...27	193-ED1ED
	9...45	193-ED1FD
	1.0...5.0	193-ED1CP
Integrated panel/DIN Rail mount and pass-thru wiring	3.2...16	193-ED1DP
	5.4...27	193-ED1EP

Bulletin 193-EE – Three-Phase Devices

- Selectable Trip Class (10, 15, 20, 30)
- Selectable manual/auto-manual reset
- Screw-type control terminals

Mounts to Contactor	Adjustment Range [A]	Cat. No.
100-C09...100-C23	0.1...0.5	193-EEAB
	0.2...1.0	193-EEBB
	1.0...5.0	193-EECB
	3.2...16	193-EEDB
	5.4...27	193-EEEB
100-C30...100-C43	5.4...27	193-EEED
	9...45	193-EEFD
100-C60...100-C97	18...90	193-EEGE
	60...120	193-EEVE
100-D95...100-D180	18...90	* 193-EEGF
	30...150	* 193-EEHF
	40...200	* 193-EEJF
	60...120	* 193-EEVF
100-D210...100-D420	40...200	* 193-EEJG
	60...300	* 193-EEKG
	100...500	* 193-EELG
100-D630...100-D860	120...600	* 193-EEMH
	160...800	* 193-EENH
Integrated panel/DIN Rail mount and pass-thru wiring	1.0...5.0	193-EECP
	3.2...16	193-EEDP
	5.4...27	193-EEEP

Package Quantity = 1

* Does not include terminal lugs. See page 2-212.

IEC Overload Relays & Modular Protection System

Product Overview

Overload Relays

Bulletin	193-ED	193-EE	193-EC1	193-EC2/EC3	193-EC5	193-EC4
Type	E1 Plus Electronic Overload Relay	E1 Plus Electronic Overload Relay	E3 Electronic Overload Relay	E3 Plus Electronic Overload Relay		E3 Plus Current Monitoring Relay
Rated Current (Range)	0.1...45 A	0.1...800 A	0.4...5000 A			
NEMA Operating Voltage, Nominal	—	600V	600V			
IEC Operating Voltage, Nominal	690V	690/1000V	690/1000V			
Overload Type	Electronic Overload	Electronic Overload	Microprocessor-Based			
Trip Class (Fixed)	10	—	—			
Trip Class (Adjustable)	—	10, 15, 20, 30	5...30		—	
Ambient Temperature Compensated	✓	✓	✓		—	
Reset Type	Manual Only	Automatic and Manual	Automatic and Manual			
Adjustment Range	5:1	5:1	5:1			
Phase Loss	3 s	3 s	Adjustable Delay			—
Ground (Earth) Fault	—	Optional	—	Sensitive	Sensitive	Sensitive
Overcurrent (Jam) Detection	—	Optional	✓	✓	✓	—
Stall Detection	—	—	✓	✓	✓	—
Underload Detection	—	—	✓	✓	✓	—
Current Imbalance	—	—	✓	✓	✓	—
PTC Thermistor Monitoring	—	Optional	—	✓	—	—
Warning Settings	—	—	✓	✓	✓	✓
N.C. Trip Contact	✓	✓	✓	✓	✓	✓
N.O. Alarm Contact	✓	✓	—	—	—	—
No. of Outputs	—	—	1	2	2	2
No. of Inputs	—	—	2	4	6	4
ODVA (DeviceNet) Conformance	—	Optional	✓	✓	✓	✓
Variable Frequency Drive (VFD) Compatible	—	—	✓	✓	✓	✓
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Overload Relays & Modular Protection System

Bulletin	193-K	193-T1	825-P
Type	Bimetallic Overload Relay		Modular Protection System
Rated Current (Range)	0.1...12.5 A	0.1...90 A	0.5...5000 A
Operating Voltage, Nominal	600V		120...240V AC/DC, 24...48V DC
Overload Type	Bimetallic		Microprocessor based
Trip Class (Fixed)	10	10	—
Ambient Temperature Compensated	✓	✓	✓
Reset Type	Automatic and Manual	Automatic and Manual	Automatic and Manual
Adjustment Range	1.5:1	1.5:1	—
Phase Loss	Normal Sensing	Normal Sensing	Adjustable delay
N.C. Trip Contact	✓	✓	✓
N.O. Alarm Contact	✓	✓	✓
Variable Frequency Drive (VFD) Compatible	✓	✓	✓
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