

Schneider
Electric

Digital Products

3DE, FDE, 3EZ, FEZ

- The first multi-functional multi-relay
- Displays trip causes and load factors
- Earth fault protection, with leakage current display
- Designated as New Electric Power Technology No. 5 (Ministry of Trade, Industry and Energy)
- Parts integration (ammeter, transducer, A/S switch, timer function)



nEOCR

3DM2 (Window/Bottom/Terminal), FDM2

- Model integration, performance improvement
- RoHS certified
- Thermal overload inverse protection added
- Convenient CT hole structure



Analog Products

SS, SP, DS3, DZ

- The first motor protection relay
- Replaces thermal relays
- Convenient to use
- Over 10 million units manufactured to date



Application Products

PMR, SDDR-C, EVR-FD, EGR

- Protection management according to voltage
- DC motor protection management
- Power outage shutdown delay function
- Load limiter and more

Application Products Other Than the AC Over Current Protection Method



BOSS automation
MARINE - INDUSTRY

WORLD AGENT

ΠΕΡΙΕΧΟΜΕΝΑ

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EOCR Analog



SS



SE2



SP-10RM



DS3

SERIES	CURRENT SETTING	CONTROL VOLTAGE	PROTECTION FUNCTION	TIME CHARACTERISTIC
EOCR-SS-05S	0.5-6A	DC/AC 24-240V	- Over Current - Phase loss - Locked Rotor - 2CT (Window Hole) - 1a1b - Panel/Rail	D-time: 1-30s O-time: 1-10s S: N+R type Definite
EOCR-SS-AR-05S				
EOCR-SS-30S	3-30A			
EOCR-SS-AR-30S				
EOCR-SS-60S	5-60A			
EOCR-SS-05W	0.5-6A	380-440VAC		
EOCR-SS-30W	3-30A			

SERIES	CURRENT SETTING	CONTROL VOLTAGE	PROTECTION FUNCTION	TIME CHARACTERISTIC
EOCR-SE2-05NS	0.5-6A	DC/AC 24-240V	- Over Current - Phase loss - Locked Rotor - 2CT (Bottom Hole) - 1c - Panel/Rail	O-time: 1-15s Definite
EOCR-SE2-30NS	3-30A			
EOCR-SE2-60NS	5-60A			
EOCR-SE2-05RS	0.5-6A			
EOCR-SE2-30RS	3-30A			
EOCR-SE2-60RS	5-60A			

SERIES	CURRENT SETTING	CONTROL VOLTAGE	PROTECTION FUNCTION	TIME CHARACTERISTIC
EOCR-SP-10RM	1-12A	AC220-240V	- Over Current - Phase loss - Locked Rotor - 1c - 2CT - PIN TYPE - MC Direct Mount	O-time: 0,5-15s Definite

SERIES	CURRENT SETTING	CONTROL VOLTAGE	PROTECTION FUNCTION	TIME CHARACTERISTIC
EOCR-DS3-05S	0.5-6A	DC/AC 24-240V	- Over Current - Phase loss - Inverse Phase - Locked Rotor - 3CT (Bottom Hole) - 1a1b - Panel/Rail	D-time: 1-50s O-time: 1-10s Definite
EOCR-DS3-30S	3-30A			
EOCR-DS3-60S	5-60A			
EOCR-DS3-H4S (EOCR-DS3-05S + 3CT-H4-400-C)	40-480A	DC/AC 24-240V		

EOCR Digital



SSD



3DE



PMZ



I3DM

SERIES	CURRENT SETTING	CONTROL VOLTAGE	PROTECTION FUNCTION
EOCR-SSD-05S	0.5-6A	DC/AC 24-240V	- 1Φ/3Φ - Over Current - Locked rotor when motor starts - Current Phase loss
EOCR-SSD-30S	3-30A		
EOCR-SSD-60S	10-60A		

SERIES	CURRENT SETTING	CONTROL VOLTAGE	PROTECTION FUNCTION
EOCR-3DE-05DUH	0,5-7A	100-240VAC/DC	- 3Φ - Over Current - Under Current - Locked rotor when motor starts/runs - Current phase loss - Current reverse phase - Unbalancing Current - 1a1b - 3CT - Panel/Rail
EOCR-3DE-80DUH	5-80A		

SERIES	CURRENT SETTING	CONTROL VOLTAGE	PROTECTION FUNCTION
EOCR-PMZ	0,5-60A 10-3600A w/external CT	85-250VAC/DC	- 3Φ - Over Current - Under Current - Locked rotor when motor starts/runs - Current phase loss - Current reverse phase - Unbalancing Current - Earth Leakage - Thermal Inverse - 3CT

SERIES	CURRENT SETTING	CONTROL VOLTAGE	PROTECTION FUNCTION
EOCR-I3DM-WRDUWZ	0,2-25A	100-240VAC/DC	- 1Φ/3Φ - Overcurrent - Under Current - Locked rotor when motor starts/runs - Current phase loss - Current reverse phase - Unbalancing Current - Thermal Inverse - MODBUS RS-48S



3DM2/FDM2



IFMS/I3MS



IFM420/I3M420



SERIES	CURRENT SETTING	CONTROL VOLTAGE	PROTECTION FUNCTION
EOCR-3DM2-WRDBWZ	0.5-80A	24VAC/DC	- 1Φ/3Φ - Overcurrent - Under Current - Locked rotor when motor starts/runs - Current phase loss - Current reverse phase - Unbalancing current - +AL(INO) - OL (1NC + 1NO) - 3CT
EOCR-3DM2-WRDUWZ		100-240VAC/DC	
EOCR-3DM2-WRDUWZ +3CT-H3-300-C (EOCR-3DM2-H3DUWZ)			
EOCR-FDM2-WRDBWZ (3CT/Window Hole)	0.5-80A	24VAC/DC	
EOCR- FDM2-WRDUWZ (3CT/Window Hole)		100-240VAC/DC	
EOCR- FDM2-WRDUHZ (3CT/Bottom Hole)			
EOCR- FDM2-WRDUTZ (3CT/Screw Conn.)			

SERIES	CURRENT SETTING	CONTROL VOLTAGE	PROTECTION FUNCTION
EOCR-IFMS-WRDUWZ	0.5-25A	100-240VAC/DC	- 1Φ/3Φ - Over Current - Under Current - Locked rotor when motor starts/runs - Current Phase loss - Current reverse phase - Unbalancing Current
EOCR-I3MS-WRDUWZ	0.5-25A		- Short (Only for IFMS/I3MS) - Thermal Inverse - 3CT (Window Hole) - Communication Function - OL (1NC + 1NO) - SH (1NO)

SERIES	CURRENT SETTING	CONTROL VOLTAGE	PROTECTION FUNCTION
EOCR-IFM420-WRDUWZ	0.5-60A	100-240VAC/DC	- 1Φ/3Φ - Over Current - Under Current - Locked rotor when motor starts/runs - Current Phase loss - Current reverse phase
EOCR-I3M420-WRDBWZ	0,5-60A	24VAC/DC	- Unbalancing Current - Thermal Inverse - OL (1NC + 1NO) - 4-20Ma Loop Current - MODBUS RS-485
EOCR-I3M420-WRDUWZ	0.5-60A	100-240VAC/DC	

EOCR

AC voltage protection relay
Monitoring Relay



EVR-PD



EVR-PD



EUCR



PMR-440N7

SERIES	CONTROL VOLTAGE	PROTECTION FUNCTION	TIME CHARACTERISTICS
EVR-1P22 (EUVR-220N7)	100-240VAC/DC	Voltage Relay 1P	-UV: 70-240V -OV: 100-300V -OT: 0,2-10sec -RT: 0,5-30sec -2Φ (L1-L2) -1C
EVR-3P44 (EUVR-440N7)	200-440VAC/DC	Voltage Relay 3P	-UV: 140-440V -OV: 200-550V -OT: 0,2-10sec -RT: 0,5-30sec -3Φ (L1-L2-L3) -1C
EVRPD-44U (EVR-PD440NZ6M)	100-240VAC <u>Voltage Range</u> 100-480V	-Over Voltage -Under Voltage -Phase Loss -Phase Reverse -Unbalance -Panel/Rail -3Φ -1C -Digital Type	Separate Operation Time

SERIES	CURRENT SETTING	CONTROL VOLTAGE	TIME CHARACTERISTICS
EUCR-05S	0.5-6A	Under Current (Light load) Relay (Protection Function) 24-240VAC/DC	U-TIME: 0,5-30sec. R-TIME: 0,5-120sec. OL: 1C Panel/Rail
EUCR-30S	3-30A		

SERIES	CONTROL VOLTAGE	PROTECTION FUNCTION
PMR-440N7 (EVR-3P44)	AC340-480V	• Phase reverse (0.1sec) • Phase Loss (1sec) • Voltage unbalance (5sec) • 1C • Panel/Rail


DSP-SS

DSP-SS1

DSP-3SS

DSP-UVR

DSP-VPR

SERIES	CURRENT SETTING	CONTROL VOLTAGE	PROTECTION FUNCTION	TIME CHARACTERISTIC
DSP06-SS-RY/NY (EOCR-SS-05S)	0.5-6,5A	90-290VAC	- Over Current - Phase Loss - 2CT (Window Hole) - 1C - Panel/Rail	- D-time: 0-30sec - O-time: 0-8sec - Definite (Normal) - R type - N type
DSP30-SS-RY/NY-H (EOCR-SS-30S)	3-30A	90-290VAC		
DSP60-SS-RY/NY (EOCR-SS-60S)	5-60A	90-290VAC		
DSP-SS1-10Z7 (EOCR-SS-05S)	0.3-12A	DC/AC 24-240V	- Over Current - Under Current - Phase Loss - Locked Rotor - 1a1b - 2CT (Window Hole)	- D-time: 0,3-30sec - O-time: 0,3-12sec - Definite - Panel/Rail
DSP-SS1-60Z7 (EOCR-SS-60S)	2-60A	DC/AC 24-240V		
N-type: trip output (95-96 , 9-98) is energized in case control power is loaded R-type: trip output (95-96 , 9-98) is NOT energized in case control power is loaded				

SERIES	CURRENT SETTING	CONTROL VOLTAGE	PROTECTION FUNCTION	TIME CHARACTERISTIC
DSP-3SS-10Z7 (EOCR-DS3)	0,3-12A	DC/AC 24-240V	- Over Current - Phase loss - Reverse Phase - Locked Rotor - 3CT (Bottom Hole) - 1a1b - Panel/Rail	- D-time: 0,3-30sec - O-time: 0,3-12sec
DSP-3SS-60Z7 (EOCR-DS3)	2-60A			
DSP30-SS3-NY-H	1,5-30A	90-290VAC		

SERIES	CONTROL VOLTAGE	PROTECTION FUNCTION	TIME CHARACTERISTICS	
DSP-22-UVR (EUVR-220N7)	AC 160-220V	Under Voltage	0-10sec	Definite
DSP-38-UVR (EUVR-440N7)	AC 350-450V	Solid State Type 1C	0-24sec	

SERIES	CONTROL VOLTAGE	PROTECTION FUNCTION
DSP-VPR44 (PMR-440N7)	300-480V	- Reverse Phase - Phase Loss - Trip Output: 1C

EOCR

Current Transformer



SERIES	VOLTAGE/CURRENT RATIO
2CT-D1-100-C	100/5A
2CT-DH-150-C	150/5A
2CT-D2-200-C	200/5A
3CT-H1-100-C	100/5A
3CT-HH-150-C	150/5A
3CT-H2-200-C	200/5A
3CT-H3-300-C	300/5A
3CT-H4-400-C	400/5A