

# Product datasheet

Specifications



## Protection relay, EOCR Digital, 0.5 to 60A, 100 to 240VAC/DC, window count, for motor protection

3DM2-WRDUWZ

### Main

Range of product	EOCR
Device short name	EOCR-3DM2
Product or component type	Protection relay
Protection type	Overload, $I_n > OC$ setting Underload, $I_n < UC$ setting Locked rotor for starting, $I_n > 2...8$ times OC setting Locked rotor for running, $I_n > 1.5...5$ times OC setting Sensitivity to phase loss Phase unbalance, 10...50 % Sensitivity to phase reverse
Product specific application	Motor protection
Network type	AC
Network frequency	50...60 Hz
Protection adjustment range	0.5...60 A
Tripping threshold	0.5...32 A (inverse and thermal) 0.5...60 A (definite)

### Complementary

[Us] rated supply voltage	100...240 V AC/DC
Mounting support	35 mm DIN rail Panel
Contacts type and composition	1 NC + 1 NO (OL) 1 NO (AL/UL/TO)
Short-circuit and overload protection	By 4 A gG fuse
[Ue] rated operational voltage	600 V AC 50...60 Hz for power circuit conforming to UL 690 V AC 50...60 Hz for power circuit conforming to CSA 690 V AC 50...60 Hz for power circuit conforming to IEC 60947-4-1
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947-4-1
Reset	Manual reset Automatic reset 0.5...1200 s Electrical 0...1 s by interruption of power supply
Time delay type	D-Time: 0...200 s O-Time: 0.2...30 s (definite) O-Time: 1...30 class (inverse and thermal) U-Time: 0.5...30 s
Display type	Bar graph 7 segments LED
Power consumption per relay	3 W

<b>Connections - terminals</b>	Control circuit: cable 2 x 1...1.5 mm <sup>2</sup> flexible with cable end - M3 Control circuit: cable 2 x 1...1.5 mm <sup>2</sup> flexible without cable end - M3 Control circuit: cable 1 x 1...2.5 mm <sup>2</sup> flexible with cable end - M3 Control circuit: cable 1 x 1...2.5 mm <sup>2</sup> flexible without cable end - M3
<b>Tightening torque</b>	Control circuit: 0.8...1.2 N.m on cable, 4.7 mm
<b>Height</b>	74.5 mm
<b>Width</b>	70 mm
<b>Depth</b>	83.8 mm
<b>Net weight</b>	0.315 kg

## Environment

<b>Standards</b>	IEC 60947-4-1
<b>Product certifications</b>	UL
<b>IP degree of protection</b>	IP20 conforming to IEC 60529
<b>Ambient air temperature for operation</b>	-20...60 °C conforming to IEC 60947-4-1
<b>Ambient air temperature for storage</b>	-40...85 °C
<b>Operating altitude</b>	2000 m
<b>Fire resistance</b>	650 °C conforming to IEC 60695-2-12 960 °C conforming to UL 94
<b>Shock resistance</b>	15 gn for 11 ms conforming to IEC 60068-2-7
<b>Vibration resistance</b>	4 gn on panel mounting conforming to IEC 60068-2-6 2 gn on 35 mm DIN rail conforming to IEC 60068-2-6
<b>Dielectric strength</b>	2 kV 50...60 Hz in between case and circuit conforming to IEC 60255-5 1 kV 50...60 Hz in between contact conforming to IEC 60255-5 2 kV 50...60 Hz in between circuit conforming to IEC 60255-5
<b>Surge withstand</b>	6 kV conforming to IEC 61000-4-5
<b>Electromagnetic compatibility</b>	Resistance to radiated electromagnetic fields: 10 V/m level 3 conforming to IEC 61000-4-3 Resistance to electrostatic discharge: 8 kV air, 6 kV contact conforming to IEC 61000-4-2 Resistance to fast transient: 2 kV conforming to IEC 61000-4-4 Conducted RF disturbances: 10 V conforming to EN 61000-4-6 Conducted RF disturbances: class A conforming to EN 55011
<b>[Ith] conventional free air thermal current</b>	3 A for control circuit
<b>Permissible current</b>	250 V, 3 A AC

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	10.2 cm
<b>Package 1 Width</b>	9.3 cm
<b>Package 1 Length</b>	8.3 cm
<b>Package 1 Weight</b>	325.0 g

## Offer Sustainability

<b>EU RoHS Directive</b>	Compliant <a href="#">EU RoHS Declaration</a>
<b>Toxic heavy metal free</b>	Yes
<b>Mercury free</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information

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RoHS exemption information      Yes

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WEEE      The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

## Contractual warranty

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Warranty      18 months

Recommended replacement(s)