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Eaton PDE34F0500TAAS

Eaton Moeller series Power Defense -
Molded Case Circuit Breaker. Circuit
breaker, 500A, 25kA, 4p, screw terminal

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PRODUCT NAME	Eaton Moeller series Power Defense molded case circuit-breaker
CATALOG NUMBER	PDE34F0500TAAS
PRODUCT LENGTH/DEPTH	257 mm
PRODUCT HEIGHT	138 mm
PRODUCT WIDTH	183 mm
PRODUCT WEIGHT	7 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	IEC IEC/EN 60947

AMPERAGE RATING	500 A
VOLTAGE RATING	220 V - 440 V
CIRCUIT BREAKER FRAME TYPE	PDE3
FEATURES	Protection unit Motor drive optional
10.10 TEMPERATURE RISE	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 SHORT-CIRCUIT RATING	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 ELECTROMAGNETIC COMPATIBILITY	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 MECHANICAL FUNCTION	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.
10.2.2 CORROSION RESISTANCE	Meets the product standard's requirements.
10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES	Meets the product standard's requirements.
10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS TO NORMAL HEAT	Meets the product standard's requirements.
10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS	Meets the product standard's requirements.
10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION	Meets the product standard's requirements.
10.2.5 LIFTING	Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 MECHANICAL IMPACT	Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 INSCRIPTIONS	Meets the product standard's requirements.

CHARACTERISTIC CURVE

[eaton-circuit-breaker-current-power-defense-mccb-characteristic-curve-019.jpg](#)

[eaton-circuit-breaker-characteristic-power-defense-mccb-characteristic-curve-003.jpg](#)

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[eaton-power-defense-mccb-dimensions-006.jpg](#)

10.3 DEGREE OF PROTECTION OF ASSEMBLIES	Does not apply, since the entire switchgear needs to be evaluated.
10.4 CLEARANCES AND CREEPAGE DISTANCES	Meets the product standard's requirements.
10.5 PROTECTION AGAINST ELECTRIC SHOCK	Does not apply, since the entire switchgear needs to be evaluated.
10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS	Does not apply, since the entire switchgear needs to be evaluated.
10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS	Is the panel builder's responsibility.
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	Is the panel builder's responsibility.
10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH	Is the panel builder's responsibility.
10.9.3 IMPULSE WITHSTAND VOLTAGE	Is the panel builder's responsibility.
10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL	Is the panel builder's responsibility.
POLLUTION DEGREE	3
MOUNTING METHOD	Fixed Complete device in housing DIN rail (top hat rail) mounting optional
UTILIZATION CATEGORY	A
AMBIENT OPERATING TEMPERATURE - MAX	70 °C
AMBIENT OPERATING TEMPERATURE - MIN	-20 °C
AMBIENT STORAGE TEMPERATURE - MAX	70 °C
AMBIENT STORAGE TEMPERATURE - MIN	-20 °C
RATED CURRENT (IU)	500 A
MAX. RATED OPERATION VOLTAGE UE AC	440
NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0

DEGREE OF PROTECTION	IP2X
DIRECTION OF INCOMING SUPPLY	Vertical and 90° in all directions
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Screw connection
LIFESPAN, MECHANICAL	15000 operations
OVERVOLTAGE CATEGORY	III
NUMBER OF POLES	Four-pole
FUNCTIONS	System and cable protection
TYPE	Circuit breaker
SPECIAL FEATURES	Thermally and magnetically adjustable (calibrated at 40 °C)
POSITION OF CONNECTION FOR MAIN CURRENT CIRCUIT	Front side
POWER LOSS	130 W
RELEASE SYSTEM	Thermomagnetic release
HANDLE TYPE	Rocker lever
SHORT DELAY CURRENT SETTING (ISD) - MAX	0 A
SHORT DELAY CURRENT SETTING (ISD) - MIN	0 A
INSTANTANEOUS CURRENT SETTING (II) - MAX	4000 A
INSTANTANEOUS CURRENT SETTING (II) - MIN	2500 A
NUMBER OF OPERATIONS PER HOUR - MAX	60
OVERLOAD CURRENT SETTING (IR) - MAX	500 A
OVERLOAD CURRENT SETTING (IR) - MIN	400 A
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 230 V, 50/60 HZ	35 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 400/415 V, 50/60 HZ	25 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 440 V, 50/60 HZ	15 kA

STANDARD TERMINALS	Screw terminal
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) AT AUXILIARY CONTACTS	4000 V
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) AT MAIN CONTACTS	8000 V
VOLTAGE RATING (DC)	250 V
RATED INSULATION VOLTAGE (UI)	800 V AC

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:



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