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DMM-160/4/I5/P-R - Switch-disconnector, DMM, 160 A, 4 pole, Emergency switching off function, With red rotary handle and yellow locking ring, in CI-K5 enclosure



172797 DMM-160/4/I5/P-R

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172797 DMM-160/4/I5/P-R

Switch-disconnector, DMM, 160 A, 4 pole, Emergency switching off function, With red rotary handle and yellow locking ring, in CI-K5 enclosure

EL-Nummer (Norway)

1405715

Switch-disconnector, Product range: Switch-disconnector, Main switch, maintenance switch, Part group reference: DMM, Stop Function: Emergency switching off function, With red rotary handle and yellow locking ring, Notes: in CI-K5 enclosure, Information about equipment supplied: auxiliary contact fitted by user., 4 pole, Notes: 1 padlock, 5 mm, Locking facility: Lockable in the 0 (Off) position, Degree of Protection: IP65, Design: surface mounting, Motor rating AC-23A, 50 - 60 Hz 400 V: P= 80 kW, Rated uninterrupted current: I_u = 160 A, Standards: IEC/EN 60947, VDE 0660, IEC/EN 60204, Switch-disconnector according to IEC/EN 60947-3

Delivery program

Product range
Switch-disconnector
Main switch
maintenance switch
Part group reference
DMM
Stop Function
Emergency switching off function
With red rotary handle and yellow locking ring
Information about equipment supplied
auxiliary contact fitted by user.
Notes
in CI-K5 enclosure
Number of poles
4 pole
Auxiliary contacts
1
0 NO
1
0 NC
Notes
1 padlock, 5 mm
Locking facility
Lockable in the 0 (Off) position

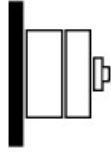
Degree of Protection

IP65

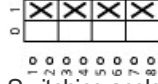
totally insulated

Design

surface mounting



Contact sequence



Switching angle

90 °

Function



Motor rating AC-23A, 50 - 60 Hz [P]

400 V [P]

80 kW

Rated uninterrupted current [I_u]

160 A

Note on rated uninterrupted current I_u

Rated uninterrupted current I_u is specified for max. cross-section.

Technical data

General

Standards

IEC/EN 60947, VDE 0660, IEC/EN 60204

Switch-disconnector according to IEC/EN 60947-3

Certifications

CE, RoHS, KEVA, EAC, Lloyds

Ambient temperatureOperation [9]

-25 - +60 °C

Ambient temperatureStorage [9]

-40 - +80 °C

Overvoltage category/pollution degree

III/3

Rated impulse withstand voltage [U_{imp}]

6 kV

Rated insulation voltage [U_i]

1000 V

Mounting position

As required

Contacts

Mechanical variablesNumber of poles

4 pole

Mechanical variablesAuxiliary contacts

0 NO

Mechanical variablesAuxiliary contacts

0 NC

Electrical characteristicsRated operational voltage [U_b]

690 V AC

Electrical characteristicsRated uninterrupted current [I_u]

160 A

Electrical characteristicsNote on rated uninterrupted current I_u

Rated uninterrupted current I_u is specified for max. cross-section.

Short-circuit ratingfuse

160

Short-circuit ratingRated conditional short-circuit current [I_q]

415 V: 30

690 V: 50 kA

Short-circuit ratingBreaking current

13.5 kA

Short-circuit ratingmax. let-through energy

86,9 kA²s

Rated short-time withstand current (1 s current) [I_{cw}]

2500 A_{rms}
 Note on rated short-time withstand current I_{cw}
 Current for a time of 1 second
 Heat dissipation per pole, current-dependent [P_{vd}]
 7.4 W
 Switching capacity
 Rated breaking capacity cos φ to IEC 60947-3400/415 V
 1080 A
 Rated breaking capacity cos φ to IEC 60947-3500 V
 528 A
 Rated breaking capacity cos φ to IEC 60947-3690 V
 336 A
 Safe isolation to EN 61140
 Current heat loss per contact at I_b
 7.4 W
 Lifespan, mechanical [Operations]
 10000
 AC AC-21A Rated operational current switch 400 V 415 V [I_e]
 160 A
 AC AC-21A Rated operational current switch 500 V [I_e]
 160 A
 AC AC-21A Rated operational current switch 690 V [I_e]
 160 A
 AC AC-22A Rated operational current switch 400 V 415 V [I_e]
 160 A
 AC AC-22A Rated operational current switch 500 V [I_e]
 160 A
 AC AC-22A Rated operational current switch 690 V [I_e]
 160 A
 AC AC-23A Rated operational current switch 400 V 415 V [I_e]
 140 A
 AC AC-23A Rated operational current switch 500 V [I_e]
 66 A
 AC AC-23A Rated operational current switch 690 V [I_e]
 42 A
 AC AC-23A Motor rating AC-23A, 50 - 60 Hz [P] 400 V 415 V [P]
 80 kW
 AC AC-23A Motor rating AC-23A, 50 - 60 Hz [P] 500 V [P]
 45 kW
 AC AC-23A Motor rating AC-23A, 50 - 60 Hz [P] 690 V [P]
 37 kW
 Terminal capacities
 Flexible with ferrules to DIN 46228 flexible
 6 - 70 mm²
 Stripping length
 21 mm
 Tightening torque for terminal screw
 7 Nm
 Technical safety parameters:

Notes

B10_d values as per EN ISO 13849-1, table C1

Design verification as per IEC/EN 61439

Technical data for design verification
 Rated operational current for specified heat dissipation [I_b]
 160 A
 Heat dissipation per pole, current-dependent [P_{vd}]
 7.4 W
 Equipment heat dissipation, current-dependent [P_{vd}]
 0 W
 Static heat dissipation, non-current-dependent [P_{vs}]
 0 W
 Heat dissipation capacity [P_{diss}]
 0 W
 Operating ambient temperature min.
 -25 °C
 Operating ambient temperature max.
 +40 °C
 IEC/EN 61439 design verification

10.2 Strength of materials and parts 10.2.2 Corrosion resistance
Meets the product standard's requirements.

10.2 Strength of materials and parts 10.2.3.1 Verification of thermal stability of enclosures
Meets the product standard's requirements.

10.2 Strength of materials and parts 10.2.3.2 Verification of resistance of insulating materials to normal heat
Meets the product standard's requirements.

10.2 Strength of materials and parts 10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects
Meets the product standard's requirements.

10.2 Strength of materials and parts 10.2.4 Resistance to ultra-violet (UV) radiation
UV resistance only in connection with protective shield.

10.2 Strength of materials and parts 10.2.5 Lifting
Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts 10.2.6 Mechanical impact
Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts 10.2.7 Inscriptions
Meets the product standard's requirements.

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 Insulation properties 10.9.2 Power-frequency electric strength
Is the panel builder's responsibility.

10.9 Insulation properties 10.9.3 Impulse withstand voltage
Is the panel builder's responsibility.

10.9 Insulation properties 10.9.4 Testing of enclosures made of insulating material
Is the panel builder's responsibility.

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.

Technical data ETIM 7.0

Low-voltage industrial components (EG000017) / Switch disconnecter (EC000216)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnecter (ecl@ss10.0.1-27-37-14-03 [AKF060013])

Version as main switch

Yes

Version as maintenance-/service switch

Yes

Version as safety switch

No

Version as emergency stop installation

Yes

Version as reversing switch

No

Number of switches

1

Max. rated operation voltage U_e AC

690 V

Rated operating voltage

690 - 690 V

Rated permanent current I_u

160 A

Rated permanent current at AC-23, 400 V

140 A
Rated permanent current at AC-21, 400 V
160 A
Rated operation power at AC-3, 400 V
0 kW
Rated short-time withstand current I_{cn}
2.5 kA
Rated operation power at AC-23, 400 V
0 kW
Switching power at 400 V
0 kW
Conditioned rated short-circuit current I_k
50 kA
Number of poles
4
Number of auxiliary contacts as normally closed contact
0
Number of auxiliary contacts as normally open contact
0
Number of auxiliary contacts as change-over contact
0
Motor drive optional
No
Motor drive integrated
No
Voltage release optional
No
Device construction
Complete device in housing
Suitable for ground mounting
Yes
Suitable for front mounting 4-hole
No
Suitable for front mounting centre
No
Suitable for distribution board installation
No
Suitable for intermediate mounting
No
Colour control element
Red
Type of control element
Short thumb-grip
Interlockable
Yes
Type of electrical connection of main circuit
Screw connection
Degree of protection (IP), front side
IP65
Degree of protection (NEMA)
Other

Dimensions



Product photo

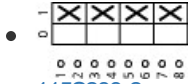


Wiring diagram



[1150SWM-38](#)

Line drawing



[115S288-2](#)

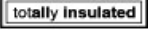
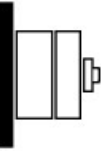
Line drawing

On-Off switches

Dimensions single product

- [1150DIM-33](#)
Line drawing

Symbol

- 
[000Z083](#)
Logo
totally insulated (en, de, fr, es, it, zh, ru, nl, sv, cs, pl, tr)
- 
[000Z428](#)
Graphic
Load current switches design
- □ [1150SPC-194](#)
Graphic

Declaration of Conformity

UK

- [Dumeco Switch-Disconnectors, type DMM \(DA-DC-00003997\)](#)
Asset
(PDF)

Instruction Leaflet

- [Switch-disconnector \(IL008006ZU\)](#)
Asset
(PDF, 03/2021, multilingual)

CAD data

edz files

- [DA-CE-ETN.DMM-160_4_I5_P-R](#)
File
(Web)

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