101446
DILM32-XTEY20(RA24)

DELIVERY PROGRAM

Product range
Accessories

Accessories
Timer modules

Description
For star-delta applications
Cannot be combined with top mounting auxiliary contacts
Incl. suppressor circuits

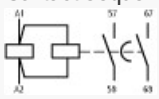
U_S
24 V AC/DC

Time range
Changeover time
1 - 30 s
Changeover delay
50 ms

For use with
DILM7 - DILM38
DILMP20

DILMP32-DILMP45
DILA
DILMF7
DILMF11
DILMF14
DILMF25
DILMF32

Contact sequence



TECHNICAL DATA

General

Standards
DIN EN 61812, IEC/EN 60947, VDE 0660, UL, CSA

Lifespan, mechanical
AC operated [Operations]
3 x 10^6

Lifespan, mechanical
DC operated [Operations]
3 x 10^6

Climatic proofing
Damp heat, constant, to IEC 60068-2-78
Damp heat, cyclic, to IEC 60068-2-30

Ambient temperature
Open
-25 - +60 °C

Ambient temperature
Enclosed
- 25 - 40 °C

Ambient temperature
Storage
- 40 - 80 °C

Mounting position
As required, except suspended

Mechanical shock resistance (IEC/EN 60068-2-27)
Half-sinusoidal shock, 10 ms
N/O contact
6 g

Mechanical shock resistance (IEC/EN 60068-2-27)
Half-sinusoidal shock, 10 ms
N/C contact
6 g

Degree of Protection
IP20

Protection against direct contact when actuated from front (EN 50274)
Finger and back-of-hand proof

Weight
0.08 kg

Terminal capacities
Solid
1 x (0.75 - 2.5)
2 x (0.75 - 1.5) mm^2

Terminal capacities
Flexible with ferrule
1 x (0.75 - 1.5)
2 x (0.75 - 1.5) mm^2

Terminal capacities
Solid or stranded
18 - 14 AWG

Terminal screw
M3.5

Pozidriv screwdriver
2 Size

Standard screwdriver
0.8 x 5.5
1 x 6 mm

Max. tightening torque
1.2 Nm

Contacts

Rated impulse withstand voltage [U_{imp}]
4000 V AC

Overvoltage category/pollution degree
III/3

Rated insulation voltage [U_i]
250 V AC

Rated operational voltage [U_e]
250 V

Rated operational current [I_e]
AC-15
220 V 230 V 240 V [I_e]
3 A

Rated operational current [I_e]
DC-13
DC-13 L/R - 15 ms
Contacts in series:
1 [24 V]
1 A

Rated operational current [I_e]
DC-13
DC-13 L/R - 15 ms
Contacts in series:
1 [60 V]
0.2 A

Rated operational current [I_e]
DC-13
DC-13 L/R - 15 ms
Contacts in series:
1 [110 V]
0.2 A

Rated operational current [I_e]
DC-13
DC-13 L/R - 15 ms
Contacts in series:
1 [220 V]
0.1 A

Rated operational current [I_e]

DC-13
DC L/R □ 50 ms
Contacts in series:
1 [24 V]
1 A

Rated operational current [I_e]
DC-13
DC L/R □ 50 ms
Contacts in series:
1 [60 V]
0.2 A

Rated operational current [I_e]
DC-13
DC L/R □ 50 ms
Contacts in series:
1 [110 V]
0.2 A

Rated operational current [I_e]
DC-13
DC L/R □ 50 ms
Contacts in series:
1 [220 V]
0.1 A

Rated operational current [I_e]
DC-13
DC-13 L/R - 300 ms
Contacts in series:
1 [24 V]
1 A

Rated operational current [I_e]
DC-13
DC-13 L/R - 300 ms
Contacts in series:
1 [60 V]
0.2 A

Rated operational current [I_e]
DC-13
DC-13 L/R - 300 ms
Contacts in series:
1 [110 V]
0.2 A

Rated operational current [I_e]
DC-13
DC-13 L/R - 300 ms
Contacts in series:
1 [220 V]
0.1 A

Safe isolation to EN 61140
between coil and auxiliary contacts
250 V AC

Safe isolation to EN 61140
between the auxiliary contacts
250 V AC

Conventional thermal current [I_{th}]
4 A

Short-circuit rating without welding
max. fuse
4 A gG/gL

Magnet systems

Voltage tolerance
Pick-up voltage
AC operated
[Pick-up]
0.85 - 1.1 x U_c

Voltage tolerance
Pick-up voltage
DC operated [Pick-up]
[Pick-up]
0.7 - 1.2 x U_c

Power consumption
60 °C [Sealing]
2 VA

Power consumption
AC operated [Sealing]
1.8 W

duty factor
100 % DF

Maximum operating frequency
Max. operating frequency
3600 Ops/h

Maximum operating frequency
Can be combined with auxiliary contact
360 Ops./h

Conventional thermal current I_{th} = I_e AC-1
On-delayed
< 50 ms

Conventional thermal current I_{th} = I_e AC-1
Off-delayed
< 200 ms

AC operated 50 Hz [Deviation]
< 5 %

Recovery time (after 100% time delay)
70 ms

contact changeover time
DILM32-XTEE11/DILM32-XTED11 [t_u]
10 ms

contact changeover time
DILM32-XTEY20 [t_u]
50 ms

Notes

Notes
For rated operational current: Making and breaking conditions to DC-13, L/R constant as stated
Max. fuses for short-circuit protection:
Transparent overlay "Fuses" for time/current characteristics (please enquire)
For pick-up voltage, DC operated:Pure DC, AC bridge rectifier or smoothed double-wave rectification.

Rating data for approved types

Auxiliary contacts
Pilot Duty
AC operated
B300

Auxiliary contacts
Pilot Duty
DC operated
R300

Auxiliary contacts
General Use
AC
240 V

Auxiliary contacts
General Use
AC
5 A

Auxiliary contacts
General Use
DC
24 V

Auxiliary contacts
General Use
DC
5 A

Short Circuit Current Rating
Basic Rating
SCCR
5 kA

Short Circuit Current Rating
Basic Rating
max. Fuse
125 A

Short Circuit Current Rating
Basic Rating
max. CB
125 A

Short Circuit Current Rating
480 V High Fault
SCCR (fuse)
10/100 kA

Short Circuit Current Rating
480 V High Fault
max. Fuse
125/70 Class J A

Short Circuit Current Rating
480 V High Fault
SCCR (CB)
10/65 kA

Short Circuit Current Rating
480 V High Fault
max. CB
50/32 A

Short Circuit Current Rating
600 V High Fault
SCCR (fuse)
10/100 kA

Short Circuit Current Rating
600 V High Fault
max. Fuse
125/125 Class J A

Short Circuit Current Rating
600 V High Fault
SCCR (CB)
10/22 kA

Short Circuit Current Rating
600 V High Fault
max. CB
50/32 A

DESIGN VERIFICATION AS PER IEC/EN 61439

Technical data for design verification

Rated operational current for specified heat dissipation [I_n]
0 A

Heat dissipation per pole, current-dependent [P_{vid}]
0 W

Equipment heat dissipation, current-dependent [P_{vid}]
0 W

Static heat dissipation, non-current-dependent [P_{vs}]
1.8 W

Heat dissipation capacity [P_{diss}]
0 W

Operating ambient temperature min.
-25 °C

Operating ambient temperature max.
+60 °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
Meets the product standard's requirements.

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

Relays (EG000019) / Timer block (EC002060)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Component for low-voltage switching technology / Timer block attachment (ecl@ss10.0.1-27-37-13-08 [ACN996011])

Switching function
Other

Setting time
1 - 30 s

Number of contacts as normally open contact
2

Number of contacts as normally closed contact
0

Number of contacts as change-over contact
0

Operating principle
Electronic

APPROVALS

Product Standards
IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05;
CE marking

UL File No.
E29184

UL Category Control No.
NKCR

CSA File No.
012528

CSA Class No.
3211-03

North America Certification
UL listed, CSA certified

DIMENSIONS