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Powering Business Worldwide

DILMT7(RDC24) - Contactor, 3 pole, 380 V 400 V: 3 kW, 24 V DC, DC operation, Screw terminals



190977 DILMT7(RDC24)

[Overview](#) [Specifications](#) [Resources](#)



## 190977 DILMT7(RDC24)

Contactor, 3 pole, 380 V 400 V: 3 kW, 24 V DC, DC operation, Screw terminals

Contactor, Application: Contactors for Motors, Contactors up to 95 A, 3 pole, Utilization category: AC-1: Non-inductive or slightly inductive loads, resistance furnaces, NAC-3: Normal AC induction motors: starting, switch off during running, AC-4: Normal AC induction motors: starting, plugging, reversing, inching, Connection technique: Screw terminals, Notes: Also suitable for motors with efficiency class IE3., Number of poles: 3 pole, Rated operational current AC-3 380 V 400 V:  $I_e = 7$  A, Rated operational current AC-1 Conventional free air thermal current, 3 pole, 50 - 60 Hz Open at 40 °C:  $I_{th} = I_e = 20$  A, Max. rating for three-phase motors, 50 - 60 Hz AC-3 220 V 230 V: P= 2.2 kW, 380 V 400 V: P= 3 kW, Can be combined with auxiliary contact: DILT-XHL., Voltage AC/DC: DC operation

- [Delivery program](#)
- [Technical data](#)
- [Design verification as per IEC/EN 61439](#)
- [Technical data ETIM 7.0](#)
- [Approvals](#)
- [Dimensions](#)

### Delivery program

Product range

Contactors

Application

Contactors for Motors

Subrange

Contactors up to 95 A, 3 pole

Utilization category

AC-1: Non-inductive or slightly inductive loads, resistance furnaces

AC-3/AC-3e: Normal AC induction motors: Starting, switching off while running

AC-4: Normal AC induction motors: starting, plugging, reversing, inching

Notes

Also suitable for motors with efficiency class IE3.

Connection technique

Screw terminals

Number of poles

3 pole

Rated operational current

AC-3Notes

Also tested according to AC-3e.

AC-3380 V 400 V [ $I_e$ ]

7 A

AC-1Conventional free air thermal current, 3 pole, 50 - 60 HzOpen at 40 °C [ $I_{th} = I_e$ ]

20 A

Max. rating for three-phase motors, 50 - 60 Hz

AC-3220 V 230 V [F]

2.2 kW

AC-3380 V 400 V [F]

3 kW

Contact sequence



### Instructions

Integrated varistor suppressor circuit.

Can be combined with auxiliary contact

DILT-XH...

Actuating voltage

24 V DC

Voltage AC/DC

DC operation

Connection to SmartWire-DT

no

Frame size

1

## Technical data

General

Standards

IEC/EN 60947, GB14048, EN60335-1

Lifespan, mechanicalDC operated [Operations]

$10 \times 10^6$

AC-3 [Operations]

$1 \times 10^6$

AC-4 [Operations]

$0.1 \times 10^6$

Operating frequency, mechanicalDC operated [Operations/h]

3600

Climatic proofing

Damp heat, constant, to IEC 60068-2-78

Damp heat, cyclic, to IEC 60068-2-30

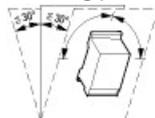
Ambient temperatureOpen

-25 - +55 °C

Ambient temperatureStorage

- 40 - 80 °C

Mounting position



Degree of Protection

IP20

WeightDC operated

0.18 kg

Screw connector terminalsTerminal capacity main cableSolid

1 x (0.75 - 2.5)

2 x (0.75 - 2.5) mm<sup>2</sup>

Screw connector terminalsTerminal capacity main cableStranded

1 x (0.75 - 2.5)

2 x (0.75 - 2.5) mm<sup>2</sup>

Screw connector terminalsTerminal capacity main cableStripping length

14 mm

Screw connector terminalsTerminal capacity main cableTerminal screw

M3.5

Screw connector terminalsTerminal capacity main cableTightening torque

0.8 Nm

Screw connector terminalsTerminal capacity main cableToolPozidriv screw driver

2 Size

Screw connector terminalsTerminal capacity control circuit cablesSolid

1 x (0.75 - 2.5)

2 x (0.75 - 2.5) mm<sup>2</sup>

Screw connector terminalsTerminal capacity control circuit cablesTerminal screw

M3.5

Screw connector terminals Terminal capacity control circuit cables Tightening torque  
0.8 Nm  
Screw connector terminals Terminal capacity control circuit cables Tool Pozidriv screw driver  
2 Size  
Main conducting paths  
Rated impulse withstand voltage [ $U_{imp}$ ]  
6000 V AC  
Overvoltage category/pollution degree  
III/3  
Rated insulation voltage [ $U_i$ ]  
690 V AC  
Rated operational voltage [ $U_e$ ]  
660 V AC  
Breaking capacity 380 V 400 V  
56 A  
AC  
AC-1 Rated operational current Conventional free air thermal current, 3 pole, 50 - 60 Hz Open at 40 °C [ $I_{th} = I_e$ ]  
20 A  
AC-3 Rated operational current Open, 3-pole: 50 – 60 Hz Notes  
Also tested according to AC-3e.  
AC-3 Rated operational current Open, 3-pole: 50 – 60 Hz 220 V 230 V [ $I_e$ ]  
7 A  
AC-3 Rated operational current Open, 3-pole: 50 – 60 Hz 240 V [ $I_e$ ]  
7 A  
AC-3 Rated operational current Open, 3-pole: 50 – 60 Hz 380 V 400 V [ $I_e$ ]  
7 A  
AC-3 Motor rating [P] 220 V 230 V [P]  
2.2 kW  
AC-3 Motor rating [P] 380 V 400 V [P]  
3 kW  
Magnet systems  
Changeover time at 100 %  $U_s$  (recommended value) Main contacts DC operated Closing delay  
56 - 64 ms  
Changeover time at 100 %  $U_s$  (recommended value) Main contacts DC operated Opening delay  
18 - 25 ms

## Design verification as per IEC/EN 61439

Operating ambient temperature min.  
-25 °C  
Operating ambient temperature max.  
+55 °C

## Technical data ETIM 7.0

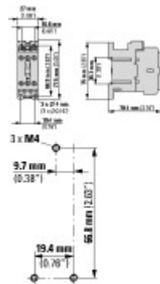
Low-voltage industrial components (EG000017) / Power contactor, AC switching (EC000066)  
Electric engineering, automation, process control engineering / Low-voltage switch technology / Contactor (LV) /  
Power contactor, AC switching (ec1@ss10.0.1-27-37-10-03 [AAB718015])  
Rated control supply voltage  $U_s$  at AC 50 Hz  
0 - 0 V  
Rated control supply voltage  $U_s$  at AC 60 Hz  
0 - 0 V  
Rated control supply voltage  $U_s$  at DC  
24 - 24 V  
Voltage type for actuating  
DC  
Rated operation current  $I_e$  at AC-1, 400 V  
20 A  
Rated operation current  $I_e$  at AC-3, 400 V  
7 A  
Rated operation power at AC-3, 400 V  
3 kW  
Rated operation current  $I_e$  at AC-4, 400 V  
0 A  
Rated operation power at AC-4, 400 V  
0 kW  
Rated operation power NEVA  
0 kW  
Modular version  
No

Number of auxiliary contacts as normally open contact  
0  
 Number of auxiliary contacts as normally closed contact  
0  
 Type of electrical connection of main circuit  
Screw connection  
 Number of normally closed contacts as main contact  
0  
 Number of main contacts as normally open contact  
3

## Approvals

Specially designed for North America  
No

## Dimensions



## Product photo



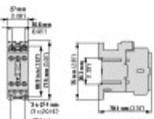
2100PIC-248  
Photo

## Wiring diagram



210S045  
Line drawing  
Contacts

## Dimensions single product

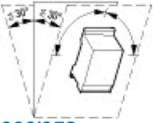


2100DIM-53  
Line drawing



2100DIM-69  
Line drawing

## 3D drawing



0001052

Line drawing  
Mounting position, contactor

2100DRW-434

Line drawing

## Declaration of Conformity

### EU

- [Eaton-AC Contactors; Control Relay; Auxiliary Contact \(DA-DC-00003681\)](#)  
Asset  
(PDF)

## Instruction Leaflet

- [Contactor relays and contactors up to 12 A \(IL034049ZU\)](#)  
Asset  
Internal packing pressure for contactor relays and contactors up to 12 A  
(PDF, 06/2018, multilingual)

## CAD data

### edz files

- [DA-CE-ETN.DILMT7\(RDC24\)](#)  
File  
(Web)

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