# **DATASHEET - DILMT80(RDC24)**



Contactor, 3 pole, 380 V 400 V: 37 kW, 24 V DC, DC operation, Screw terminals



Part no. DILMT80(RDC24) Catalog No. 190986

	livery		

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 NAC-3: Normal AC induction motors: starting, switch off during running AC-4: Normal AC induction motors: starting, plugging, reversing, inching
Notes			Not suitable for motors with efficiency class IE3.
Connection technique			Screw terminals
Number of poles			3 pole
Rated operational current			
AC-3			
380 V 400 V	I <sub>e</sub>	Α	80
AC-1			
Conventional free air thermal current, 3 pole, 50 - 60 Hz			
Open			
at 40 °C	$I_{th} = I_e$	Α	110
Max. rating for three-phase motors, 50 - 60 Hz			
AC-3			
220 V 230 V	P	kW	25
380 V 400 V	P	kW	37
660 V 690 V	P	kW	37
Contact sequence			$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Can be combined with auxiliary contact			DILT-XHI01(10) DILMT95-XHI11-SR
Actuating voltage			24 V DC
Voltage AC/DC			DC operation
Connection to SmartWire-DT			no
Frame size			4

### **Technical data**

#### General

Standards			IEC/EN 60947, GB14048
Lifespan, mechanical			
DC operated	Operations	x 10 <sup>6</sup>	5
Operating frequency, mechanical			
DC operated	Operations/h		3600
Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature			
Open		°C	-25 - +55
Storage		°C	- 40 - 80

Page	Mounting position			\$30° \$30°
	Degree of Protection			IP20
	Weight			
Terminal capacity main cable	DC operated		kg	1.26
Solid	Screw connector terminals			
	Terminal capacity main cable			
Surgoing length   Image: Part   Image: Par	Solid		mm <sup>2</sup>	1 x (6 - 50) 2 x (6 - 25)
Terminal screw	Stranded		mm <sup>2</sup>	
Tightening torque	Stripping length		mm	16
Tool	Terminal screw			M8
Hexagon socket-head spanner	Tightening torque		Nm	
Terminal capacity control circuit cables	Tool			
Note	Hexagon socket-head spanner	SW	mm	4
Terminal screw	Terminal capacity control circuit cables			
Tightening torque	Solid		mm <sup>2</sup>	
Tool   Pozidr's screwdriver   Size   2	Terminal screw			M3.5
Pozidriv screwdriver         Size         2           Main conducting paths         Size         6000           Rated inpulse withstand voltage         U <sub>Imp</sub> V AC         6000           Overvoltage category/pollution degree         Ui         V AC         690           Brated operational voltage         U <sub>e</sub> V AC         690           Breaking capacity/         AC         400           380 V 400 V         AC         AC           Rated operational current         AC -1         AC           Open         AI -1         A         110           AC-3         Breated operational current         Breated operatio	Tightening torque		Nm	1.2
Main conducting paths         Vac bood         Bood           Rated impulse withstand voltage         Uimp         VAC         6000           Overvoltage category/pollution degree         III/3         III/3           Rated insulation voltage         Ue         VAC         690           Breaking capacity         640         640           380 V 400 V         A         640           AC-1         Rated operational current         Image: Conventional free air thermal current, 3 pole, 50 - 60 Hz         Image: Conventional free air thermal current, 3 pole, 50 - 60 Hz         Image: Conventional free air thermal current at the pole of the conventional current         Image: Conventional current         Image: Conventional current at the pole of the conventional	Tool			
Rated impulse withstand voltage         Uimp         V AC         6000           Overvoltage categony/pollution degree         Ui         V AC         690           Rated operational voltage         Ue         V AC         690           Breaking capacity         AC         640           380 V 400 V         A         640           AC-1           Rated operational current         Bate of thermal current, 3 pole, 50 - 60 Hz         Bate of thermal current, 3 pole, 50 - 60 Hz           Open         at 40 °C         Image of the pole			Size	2
Overvoltage category/pollution degree         Ui         V AC         690           Rated insulation voltage         Ue         V AC         690           Breaking capacity         Breaking capacity         AC         640           ACT           ACT           Rated operational current         Free Park of the mail current, 3 pole, 50 - 60 Hz         Free Park o				
Rated insulation voltage         U <sub>I</sub> V AC         690           Rated operational voltage         U <sub>B</sub> V AC         690           Breaking capacity         A         640           ACC         A         640           ACC-1         Rated operational current         Conventional free air thermal current, 3 pole, 50 - 60 Hz         Feet of the pole of the po		U <sub>imp</sub>	V AC	
Rated operational voltage       Ue       VAC       690         Breaking capacity       A       640         ACC       A       640         ACC-1       Breated operational current       Conventional free air thermal current, 3 pole, 50 - 60 Hz       Breated operational current       In the le       A       110         AC-3       Brated operational current       In the le       A       80         AC-3       Brated operational current       In the le       A       80         AC-3       A       80         Brated operational current       In the le       A       80         AC-3       A       80         Brated operational current       In the le       A       80         AC-3       A       80         AC-3       Brated operational current       Brated operational current       Brated operational current       Brated operational current         AC-3       Brated operational current       Brated operational current       Brated operational current       Brated op				
Breaking capacity 380 V 400 V  AC-1 Rated operational current, 3 pole, 50 - 60 Hz Open at 40 °C  AC-3 Rated operational current Open, 3-pole: 50 − 60 Hz 220 V 230 V  380 V 400 V  Motor rating 220 V 230 V  Motor rating 220 V 230 V  Row Rated operational current I e				690
AC-1 Rated operational current, 3 pole, 50 - 60 Hz Open at 40 °C  AC-3 Rated operational current Open, 3-pole: 50 - 60 Hz 220 V 230 V Ie A B B B B B B B B B B B B B B B B B B B	Rated operational voltage	U <sub>e</sub>	V AC	690
AC-1  Rated operational current  Conventional free air thermal current, 3 pole, 50 - 60 Hz  Open  at 40 °C  AC-3  Rated operational current  Open, 3-pole: 50 - 60 Hz  220 V 230 V  le A 380 V 400 V  le A 380 V 400 V  Motor rating  Motor rating  P kW  220 V 230 V  Rether the management of the manageme	Breaking capacity			
AC-1 Rated operational current Conventional free air thermal current, 3 pole, 50 - 60 Hz  Open at 40 °C  AC-3 Rated operational current Open, 3-pole: 50 - 60 Hz  220 V 230 V  Ie AC 380 V 400 V  Ie AC 380 V 400 V  Ie AC			Α	640
Conventional free air thermal current, 3 pole, 50 - 60 Hz       We will be a conventional free air thermal current.       A conventional free air thermal current.         AC-3       Rated operational current       We will be a conventional current.         Open, 3-pole: 50 - 60 Hz       We will be a conventional current.         220 V 230 V       Ie       A       80         240 V       Ie       A       80         380 V 400 V       Ie       A       80         Motor rating       P       kWh         220 V 230 V       P       kW       25         380 V 400 V       P       kW       37				
Open       Ith = Ie       A       110         AC-3       Rated operational current       Ie       A         Open, 3-pole: 50 – 60 Hz       Ie       A       80         220 V 230 V       Ie       A       80         380 V 400 V       Ie       A       80         380 V 400 V       Ie       A       80         Motor rating       P       kWh         220 V 230 V       P       kW       25         380 V 400 V       P       kW       25         380 V 400 V       P       kW       37	Rated operational current			
at 40 °C       Ith = Ie       A       110         AC-3       Rated operational current       Feature of the properties of the	Conventional free air thermal current, 3 pole, 50 - 60 Hz			
AC-3  Rated operational current  Open, 3-pole: 50 – 60 Hz  220 V 230 V  Ie A 80  240 V  Ie A 80  380 V 400 V  Ie A 80  Motor rating  P kWh  220 V 230 V  P kW 37	Open			
Rated operational current       Open, 3-pole: 50 – 60 Hz         220 V 230 V       I <sub>e</sub> A       80         240 V       I <sub>e</sub> A       80         380 V 400 V       I <sub>e</sub> A       80         380 V 400 V       I <sub>e</sub> A       80         Motor rating       P       kWh         220 V 230 V       P       kW       25         380 V 400 V       P       kW       37	at 40 °C	$I_{th} = I_e$	Α	110
Open, 3-pole: 50 – 60 Hz       Ie       A       80         220 V 230 V       Ie       A       80         240 V       Ie       A       80         380 V 400 V       Ie       A       80         380 V 400 V       Ie       A       80         Motor rating       P       kWh         220 V 230 V       P       kW       25         380 V 400 V       P       kW       37	AC-3			
220 V 230 V       I <sub>e</sub> A       80         240 V       I <sub>e</sub> A       80         380 V 400 V       I <sub>e</sub> A       80         380 V 400 V       I <sub>e</sub> A       80         Motor rating       P       kWh         220 V 230 V       P       kW       25         380 V 400 V       P       kW       37	Rated operational current			
240 V	Open, 3-pole: 50 – 60 Hz			
380 V 400 V  I <sub>e</sub> A 80  380 V 400 V  I <sub>e</sub> A 80  Motor rating P kWh  220 V 230 V P kW 25  380 V 400 V P kW 37	220 V 230 V	l <sub>e</sub>	Α	80
380 V 400 V	240 V	le	А	80
Motor rating         P         kWh           220 V 230 V         P         kW         25           380 V 400 V         P         kW         37	380 V 400 V	I <sub>e</sub>	Α	80
220 V 230 V P kW 25 380 V 400 V P kW 37	380 V 400 V	I <sub>e</sub>	А	80
220 V 230 V P kW 25 380 V 400 V P kW 37	Motor rating	Р	kWh	
		Р	kW	25
	380 V 400 V	P	kW	37
	660 V 690 V	P	kW	37

# Design verification as per IEC/EN 61439

Technical data for design verification			
Operating ambient temperature min.	°C	-	-25
Operating ambient temperature max.	°C	Ę	55

### **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 (ecl@ss Rated control supply voltage Us at AC 50HZ  Rated control supply voltage Us at AC 60HZ  V 0 - 0  Rated control supply voltage Us at DC  V 24 - 24  Voltage type for actuating  Rated operation current le at AC-1, 400 V  Rated operation current le at AC-3, 400 V  A 80				
Rated control supply voltage Us at AC 50HZ  Rated control supply voltage Us at AC 60HZ  V 0 - 0  Rated control supply voltage Us at DC  V 24 - 24  Voltage type for actuating  Rated operation current le at AC-1, 400 V  A 110	Low-voltage industrial components (EG000017) / Power contactor, AC switching (EC000066)			
Rated control supply voltage Us at AC 60HZ  Rated control supply voltage Us at DC  V 24 - 24  Voltage type for actuating  Rated operation current le at AC-1, 400 V  A 110	Electric engineering, automation, process control engineering / Low-voltage switch technology / Contactor (LV) / Power contactor, AC switching (ecl@ss10.0.1-27-37-10-03 [AAB718015])			
Rated control supply voltage Us at DC  V 24 - 24  Voltage type for actuating  DC  Rated operation current le at AC-1, 400 V  A 110				
Voltage type for actuating DC Rated operation current le at AC-1, 400 V A 110				
Rated operation current le at AC-1, 400 V A 110				
Rated operation current le at AC-3, 400 V A 80				
Rated operation power at AC-3, 400 V kW 37				
Rated operation current le at AC-4, 400 V				
Rated operation power at AC-4, 400 V kW 0				
Rated operation power NEMA kW 0				
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**



