



Contactor, 3 pole, 380 V 400 V 15 kW, 1 N/O, 1 NC, 230 V 50 Hz, 240 V 60 Hz,
AC operation, Push in terminals

EATON
Powering Business Worldwide™

Part no. **DILM32-11(230V50HZ,240V60HZ)-PI**
Catalog No. **199289**
Alternate Catalog No. **XTCEPI032C11F**

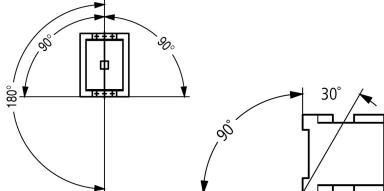
Delivery program

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		
	IE3 ✓		
Notes	Also suitable for motors with efficiency class IE3.		
Connection technique	Push in terminals		
Number of poles	3 pole		
Rated operational current			
AC-3			
Notes	At maximum permissible ambient temperature (open.) Also tested according to AC-3e.		
380 V 400 V	I_e	A	32
AC-1			
Conventional free air thermal current, 3 pole, 50 - 60 Hz			
Open			
at 40 °C	$I_{th} = I_e$	A	45
enclosed	I_{th}	A	36
Conventional free air thermal current, 1 pole			
open	I_{th}	A	100
enclosed	I_{th}	A	90
Max. rating for three-phase motors, 50 - 60 Hz			
AC-3			
220 V 230 V	P	kW	10
380 V 400 V	P	kW	15
660 V 690 V	P	kW	17
AC-4			
220 V 230 V	P	kW	4
380 V 400 V	P	kW	7
660 V 690 V	P	kW	10
Contacts			
N/O = Normally open	1 N/O		
N/C = Normally closed	1 NC		
Contact sequence			
Instructions	Contacts to EN 50 012. with mirror contact.		
Can be combined with auxiliary contact	DILM32-XHI...-PI DILA-XHI(V)...-PI		
Actuating voltage	230 V 50 Hz, 240 V 60 Hz		
Voltage AC/DC	AC operation		

Connection to SmartWire-DT	no
Frame size	2

Technical data

General

Standards	IEC/EN 60947, VDE 0660, UL, CSA	
Operating frequency, mechanical		
AC operated	Operations/h	5000
Climatic proofing	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30	
Ambient temperature		
Open	°C	-25 - +60
Enclosed	°C	-25 - 40
Storage	°C	-40 - 80
Mounting position		
Mechanical shock resistance (IEC/EN 60068-2-27)		
Half-sinusoidal shock, 10 ms		
Main contacts		
N/O contact	g	10
Auxiliary contacts		
N/O contact	g	7
N/C contact	g	5
Mechanical shock resistance (IEC/EN 60068-2-27) when tabletop-mounted		
Half-sinusoidal shock, 10 ms		
Main contacts		
N/O contact	g	6.9
Auxiliary contacts		
N/O contact	g	5.3
N/C contact	g	3.5
Degree of Protection	IP20	
Protection against direct contact when actuated from front (EN 50274)	Finger and back-of-hand proof	
Altitude	m	Max. 2000
Weight		
AC operated	kg	0.44
Spring-loaded terminal connection		
Tool		
Standard screwdriver	3.0 x 0.5	
Push-in terminals		
Terminal capacity main cable		
Solid	mm ²	1 x (1 - 6) 2 x (1 - 6)
flexible	mm ²	1 x (1 - 10) 2 x (1 - 6)
flexible with ferrules	mm ²	1 x (1 - 6) 2 x (1 - 4)
flexible with ultrasonic welded busbar end	mm ²	1 x (1 - 10) 2 x (1 - 6)
flexible with uninsulated wire end ferrule	mm ²	1 x (1 - 6) 2 x (1 - 6)
Solid or stranded	AWG	18 - 8
Stripping length	mm	12
Standard screwdriver	3.0 x 0.5	
Terminal capacity control circuit cables		

Solid		mm ²	1 x (0,5 - 2,5) 2 x (0,5 - 2,5)
flexible		mm ²	1 x (0,5 - 2,5) 2 x (0,5 - 2,5)
flexible with ferrules		mm ²	1 x (0,5 - 1,5) 2 x (0,5 - 1,5)
flexible with ultrasonic welded busbar end		mm ²	1 x (0,5 - 2,5) 2 x (0,5 - 2,5)
flexible with uninsulated wire end ferrule		mm ²	1 x (0,5 - 2,5) 2 x (0,5 - 2,5)
Solid or stranded		AWG	20 - 14
Stripping length		mm	10
Tool			
Standard screwdriver		mm	3.0 x 0.5

Main conducting paths

Rated impulse withstand voltage	U _{imp}	V AC	8000
Overvoltage category/pollution degree			III/3
Rated insulation voltage	U _i	V AC	690
Rated operational voltage	U _e	V AC	690
Safe isolation to EN 61140			
between coil and contacts		V AC	400
between the contacts		V AC	400
Making capacity (p.f. to IEC/EN 60947)		Up to 690 V	A
			384
Breaking capacity			
220 V 230 V		A	320
380 V 400 V		A	320
500 V		A	320
660 V 690 V		A	180
Short-circuit rating			
Short-circuit protection maximum fuse			
Type "2" coordination			
400 V	gG/gL 500 V	A	50
690 V	gG/gL 690 V	A	35
Type "1" coordination			
400 V	gG/gL 500 V	A	125
690 V	gG/gL 690 V	A	63

AC

AC-1			
Rated operational current			
Conventional free air thermal current, 3 pole, 50 - 60 Hz			
Open			
at 40 °C	I _{th} = I _e	A	45
at 50 °C	I _{th} = I _e	A	43
at 55 °C	I _{th} = I _e	A	42
at 60 °C	I _{th} = I _e	A	40
enclosed	I _{th}	A	36
Conventional free air thermal current, 1 pole			
open	I _{th}	A	100
enclosed	I _{th}	A	90
AC-3			
Rated operational current			
Open, 3-pole: 50 - 60 Hz			
Notes			At maximum permissible ambient temperature (open.) Also tested according to AC-3e.
220 V 230 V	I _e	A	32
240 V	I _e	A	32

380 V 400 V	I_e	A	32
415 V	I_e	A	32
440V	I_e	A	32
500 V	I_e	A	32
660 V 690 V	I_e	A	18
Motor rating	P	kWh	
220 V 230 V	P	kW	10
240V	P	kW	11
380 V 400 V	P	kW	15
415 V	P	kW	19
440 V	P	kW	20
500 V	P	kW	23
660 V 690 V	P	kW	17

AC-4

Open, 3-pole: 50 – 60 Hz			
220 V 230 V	I_e	A	15
240 V	I_e	A	15
380 V 400 V	I_e	A	15
415 V	I_e	A	15
440 V	I_e	A	15
500 V	I_e	A	15
660 V 690 V	I_e	A	12
Motor rating	P	kWh	
220 V 230 V	P	kW	4
240 V	P	kW	4.5
380 V 400 V	P	kW	7
415 V	P	kW	7.5
440 V	P	kW	8
500 V	P	kW	9
660 V 690 V	P	kW	10

Current heat loss

3 pole, at I_{th} (60°)	W	10.3
Current heat loss at I_e to AC-3/400 V	W	6.6
Impedance per pole	$m\Omega$	2.7

Magnet systems

Voltage tolerance			
AC operated	Pick-up	$\times U_c$	0.8 - 1.1
Drop-out voltage AC operated	Drop-out	$\times U_c$	0.3 - 0.6
Power consumption of the coil in a cold state and $1.0 \times U_S$			
50 Hz	Pick-up	VA	52
50 Hz	Sealing	VA	7.1
50 Hz	Sealing	W	2.1
60 Hz	Pick-up	VA	67
60 Hz	Sealing	VA	8.7
60 Hz	Sealing	W	2.1
Duty factor		% DF	100
Changeover time at 100 % U_S (recommended value)			
Main contacts			
AC operated			
Closing delay	ms	16 - 22	
Opening delay	ms	8 - 14	
Arcing time	ms	10	

Electromagnetic compatibility (EMC)

Emitted interference		According to EN 60947-1
Interference immunity		According to EN 60947-1

Rating data for approved types

Switching capacity			
Maximum motor rating			
Three-phase			
200 V 208 V	HP	10	
230 V 240 V	HP	10	
460 V 480 V	HP	20	
575 V 600 V	HP	25	
Single-phase			
115 V 120 V	HP	3	
230 V 240 V	HP	5	
General use	A	40	
Auxiliary contacts			
General Use			
AC	V	600	
AC	A	10	
DC	V	250	
DC	A	1	
Short Circuit Current Rating	SCCR		
Basic Rating			
SCCR	kA	5	
max. Fuse	A	125	
max. CB	A	125	

Design verification as per IEC/EN 61439

Technical data for design verification			
Operating ambient temperature min.	°C	-25	
Operating ambient temperature max.	°C	60	

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@ss10.0.1-27-37-10-03 [AAB718015])			
Rated control supply voltage Us at AC 50Hz	V	230 - 230	
Rated control supply voltage Us at AC 60Hz	V	240 - 240	
Rated control supply voltage Us at DC	V	0 - 0	
Voltage type for actuating		AC	
Rated operation current Ie at AC-1, 400 V	A	45	
Rated operation current Ie at AC-3, 400 V	A	32	
Rated operation power at AC-3, 400 V	kW	15	
Rated operation current Ie at AC-4, 400 V	A	15	
Rated operation power at AC-4, 400 V	kW	7	
Rated operation power NEMA	kW	0	
Modular version		No	
Number of auxiliary contacts as normally open contact		1	
Number of auxiliary contacts as normally closed contact		1	
Type of electrical connection of main circuit		Spring clamp connection	
Number of normally closed contacts as main contact		0	
Number of main contacts as normally open contact		3	

Approvals

Product Standards		IEC/EN 60947-4-1; UL 60947-4-1; CSA - C22.2 No. 60947-4-1-14; CE marking
UL File No.		E29096

UL Category Control No.	NLDX
CSA File No.	012528
CSA Class No.	2411-03, 3211-04
North America Certification	UL listed, CSA certified
Specially designed for North America	No

Characteristics

1: Overload relay

2: Suppressor

3: Auxiliary contact modules

Switching conditions for non-motor consumers, 3 pole, 4 pole

Operating characteristics

Non inductive and slightly inductive loads

Electrical characteristics

Switch on: 1 x rated operational current

Switch off: 1 x rated operational current

Utilization category

100 % AC-1

Typical examples of application

Electric heat

Dimensions

