

Type: 22DILEM Article No.: 010112



Ordering information				
Connection technique			Screw terminals	
Description			4–pole	
Conventional thermal current I th = I e AC-1 Open	$I_{\rm th} = I_{\rm e}$	А	10	
Contacts N/O = Normally open			2 N/O	
Contacts N/C = Normally closed			2 N/C	
Can be combined with contactor			DILE(E)M-10(-G)() DILEM-4(-G)()	

Contact sequence

31 43 53 121 54

Notes concerning the product group

Auxiliary contact module contacts:

- ...DILEM to EN 50 012
- ...DILE to EN 50 005

Contacts to EN 50012 should be given preference.

Auxiliary contact modules with interlocked opposing contacts.

Not in the case of early-make or late-break contacts

General

Standards		IEC/EN 60947, VDE 0660, CSA, UL
Maximum operating frequency		
Mechanical	Ops./h	9000
Climatic proofing		Damp heat, constant, to IEC 60068–2–78 Damp heat cyclic to IEC 60068–2–30
Ambient temperature		
Open	°C	-25/50
Enclosed	°C	-25/40
Mechanical shock resistance (IEC/EN 60068-2-27)		
Half-sinusoidal shock, 10 ms		
Basic unit without auxiliary contact module		
Main contacts, make contacts	g	10
Main contacts Make/break contacts	g	10/8
Basic unit with auxiliary contact module		
Main contacts make contact	g	10
Auxiliary contacts Make/break contacts	g	20/20
Protection type		IP 20
Protection against direct contact when actuated from front (IEC 536)		Finger and back–of-hand proof
Terminal capacity of auxiliary and main contacts		
Solid	mm ²	1 × (0.75 – 2.5) 2 × (0.75 – 2.5)
Flexible with ferrule	mm ²	1 × (0.75 – 1.5) 2 × (0.75 – 1.5)
Solid or stranded	AWG	18 – 14
Terminal screw		M3.5
Pozidriv screwdriver	Size	2
Standard screwdriver	mm	0.8 × 5.5 1 × 6
Max. tightening torque	Nm	1,2
Terminal capacity springloaded terminals main and control circuits		
Solid	mm ²	1 × (1 – 2.5) 2 × (1 – 2.5)

Flexible with ferrule		mm ²	1 × (1 – 2.5) 2 × (1 – 2.5)
Standard screwdriver		mm	0.6 × 3.5
Main conducting paths			
Rated impulse withstand voltage	<i>U</i> _{imp}	V AC	6000
Overvoltage category/pollution degree			III/3
Rated insulation voltage			
AC	Ui	V AC	690
Rated operational voltage			
Rated operational voltage	Ue	V AC	690
Safe isolation to VDE 0106 Part 101 and Part 101/A1			
between coil and contacts		V AC	300
between the contacts		V AC	300
Making capacity (cos to IEC/EN 60947)		А	110
Breaking capacity			
220/230 V		А	90
380/400 V		А	90
500 V		А	64
660/690 V		А	54
Short-circuit protection maximum fuse			
Type "2" coordination	gL/gG	А	10
Type "1" coordination	gL/gG	А	20
AC			
AC-1 duty			
conv. therm. current 3 pole 50 – 60 Hz			
open			
at 40 °C	I _{th}	А	22
at 50 °C	I _{th}	А	20
at 55 °C	I _{th}	А	19
enclosed	I _{th}	А	16
AC-3 duty			
Rating, AC–3 motor load switch			
380/400 V	Р	kW	4
AC-4 duty			

AC-4			
380/400 V	Р	kW	3
DC			
Operations			
Magnet systems			
Duty factor		% DF	100
Switching times at 100 % $U_{\rm c}$			
Reversing contactors			
Arcing time at 690 V AC		ms	max. 12
Auxiliary contacts			
Interlocked opposing contacts to ZH 1/457, including auxiliary contact module			Yes
Rated impulse withstand voltage	$U_{\rm imp}$	V AC	6000
Overvoltage category/pollution degree			III/3
Rated insulation voltage	Ui	V AC	690
Rated operational voltage			
Rated operational voltage	Ue	V AC	600
Safe isolation to VDE 0106 Part 101 and Part 101/A1			
between coil and auxiliary contacts		V AC	300
between the auxiliary contacts		V AC	300
Rated operational current			
AC-15			
220/240 V	<i>l</i> e	А	4
380/415 V	l _e	А	2
500 V	<i>l</i> e	А	1,5
DV-13			
Contacts in series:			
1	24 V	А	2,5
2	60 V	А	2,5
3	100 V	А	1,5
3	220 V	А	0,5
Conventional thermal current	I _{th}	А	10
Control circuit reliability (at $U_e = 24 \text{ V}$ DC, $U_{min} = 17 \text{ V}$, $I_{min} = 5.4 \text{ mA}$)	Failure rate		-8, < one failure at 100 million operations
Component lifespan at $U_{\rm e}$ = 240 V			
AC-15	Operations	× 10 ⁶	0,2
DC-13			

$L/R = 50$ ms: 2 contacts in series at I_e = 0.5 A	Operations	× 10 ⁶	0,15
Short-circuit rating without welding			
Maximum overcurrent protective device			PKZM0-4
Short–circuit protection maximum fuse			
500 V		A gG/gL	6
500 V		A fast	10
Current heat loss at <i>I</i> th			
Per contact		W	0,2
Notes			
			At maximum permissible ambient temperature. Smoothed DC or three-phase bridge rectifier Making and breaking conditions to DC-13, time L/R constant as stated

Mounting position

As required except vertical with terminals A1/A2 at the bottom



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