MOELLER

Type: **DILM40(230V50HZ,240V60HZ)**
Article No.: **277766**

Ordering information			
Rated operational current AC–3 400 V	I_e	A	40
Max. rating for three–phase motors, 50 – 60 Hz AC–3 230 V	*P*	kW	12.5
Max. rating for three–phase motors, 50 – 60 Hz AC–3 400 V	*P*	kW	18.5
Max. rating for three–phase motors, 50 – 60 Hz AC–3 690 V	*P*	kW	23
Max. rating for three–phase motors, 50 – 60 Hz AC–4 230 V	*P*	kW	5
Max. rating for three–phase motors, 50 – 60 Hz AC–4 400 V	*P*	kW	9
Max. rating for three–phase motors, 50 – 60 Hz AC–4 690 V	*P*	kW	12
Conventional thermal current I th = I e AC–1 Open	$I_{th} = I_e$	A	50
For use with			DILM150–XHI(V).. DILM1000–XHI(V)..

General			
Standards			IEC/EN 60947, VDE 0660, UL, CSA
Lifespan, mechanical			
AC operated	Operations	× 10^6	10
DC operated	Operations	× 10^6	10
Operating frequency, mechanical			
AC operated	Operations/h		5000
DC operated	Operations/h		5000
Climatic proofing			Damp heat, constant, to IEC 60068–2–78 Damp heat, cyclical, to IEC 60068–2–30
Ambient temperature			

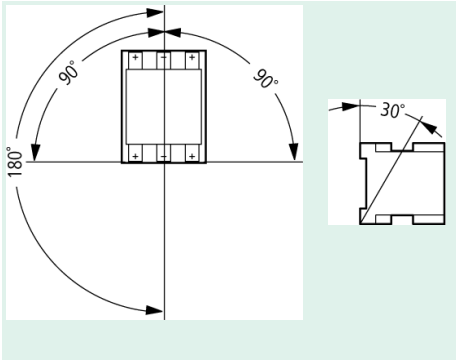
Open		°C	–25/60
Enclosed		°C	–25/40
Storage		°C	–40/80
Mechanical shock resistance (IEC/EN 60068–2–27)			
Half–sinusoidal shock, 20 ms			
Main contacts			
Make contact		g	10
Auxiliary contacts			
Make contact		g	7
Break contact		g	5
Protection type			IP00
Protection against direct contact when actuated from front (IEC 536)			Finger– and back–of–hand proof
Weight			
AC operated		kg	0,9
DC operated		kg	1,1
Terminal capacity Main cable			
Solid		mm^2	1 × (2.5 – 16) 2 × (2.5 – 16)
Flexible with ferrule		mm^2	2 × (2.5 – 25) 1 × (2.5 – 35)
Stranded		mm^2	1 × (16 – 50) 2 × (16 – 35)
Solid or stranded		AWG	12 – 2
flat conductor	Number of segments × width × thickness	mm	2 × (6 × 9 × 0.8)
Anschlussschraube Hauptleiter			M6
Tightening torque		Nm	3
Terminal capacity Control circuit cables			
Solid		mm^2	1 × (0.75 – 4) 1 × (0.75 – 4)
Flexible with ferrule		mm2	1 × (0.75 – 2.5) 2 × (0.75 – 2.5)
Solid or stranded		AWG	18 – 14
Anschlussschraube Hilfsleiter			M3.5
Tightening torque		Nm	1.2
Tool			
Main cable			
Pozidriv screwdriver		Size	2
Standard screwdriver		mm	0.8 × 5.5 1 × 6
Control circuit cables			
Pozidriv screwdriver		Size	2
Standard screwdriver		mm	0.8 × 5.5 1 × 6
Terminal capacity Control circuit cables			
Solid		mm^2	0.75 – 2.5

Flexible		mm^2	0.75 – 2.5
Flexible with ferrule		mm^2	0.75 – 2.5
Solid or stranded		AWG	18 – 14
Tool			
Stripping length		mm	10
Screwdriver blade width		mm	3,5
Main conducting paths			
Rated impulse withstand voltage	U_{imp}	V AC	8000
Overvoltage category/pollution degree			III/3
Rated insulation voltage			
AC	U_i	V AC	690
Rated operational voltage	U_e	V AC	690
Safe isolation to VDE 0106 Part 101 and Part 101/A1			
between coil and contacts		V AC	440
between the contacts		V AC	440
Making capacity (cos Õ to IEC/EN 60947) up to 690 V		A	560
Breaking capacity			
220/230 V		A	400
380/400 V		A	400
500 V		A	400
660/690 V		A	250
Component lifespan			
AC–3/AC–4			Tripping characteristics
Maximum operating frequency			
AC–1; 400 V	I_e	Ops/h	800
AC–3; 400 V	I_e	Ops/h	800
AC–4; 400 V	I_e	Ops/h	300
Short–circuit rating			
Short–circuit protection Maximum fuse			
Type “2” coordination			
400 V	gG/gL 500 V	A	63
690 V	gG/gL 690 V	A	50
Type “1” coordination			
400 V	gG/gL 500 V	A	125
690 V	gG/gL 690 V	A	80
AC			
AC–1 duty			
conv. therm. current 3–pole 50 – 60 Hz			
open			
at 40 °C	I_{th}	A	60
at 50 °C	I_{th}	A	57
at 55 °C	I_{th}	A	55
at 60 °C	I_{th}	A	50
Enclosed	I_{th}	A	45

Conventional free air thermal current, 1–pole			
open	I_{th}	A	125
Enclosed	I_{th}	A	112
AC–3 duty			
Rated operational current AC–3 open, 50 – 60 Hz, 3–pole			
220/230 V	I_e	A	40
240 V	I_e	A	40
380/400 V	I_e	A	40
415 V	I_e	A	40
440V	I_e	A	40
500 V	I_e	A	40
660/690 V	I_e	A	25
Motor rating			
220/230 V	*P*	kW	12,5
240V	*P*	kW	13,5
380/400 V	*P*	kW	18,5
415 V	*P*	kW	24
440 V	*P*	kW	25
500 V	*P*	kW	28
660/690 V	*P*	kW	23
AC–4 duty			
Rated operational current AC–4 open, 50 – 60 Hz, 3–pole			
220/230 V	I_e	A	18
240 V	I_e	A	18
380/400 V	I_e	A	18
415 V	I_e	A	18
440 V	I_e	A	18
500 V	I_e	A	18
660/690 V	I_e	A	14
Motor rating			
220/230 V	*P*	kW	5
240 V	*P*	kW	5,5
380/400 V	*P*	kW	9
415 V	*P*	kW	9,5
440 V	*P*	kW	10
500 V	*P*	kW	11
660/690 V	*P*	kW	12
DC			
of three–phase capacitors open			
DC–1 operation			
60 V	I_e	A	50
110 V	I_e	A	50
220 V	I_e	A	45
440 V	I_e	A	2,9
DC–3 operation			

60 V	I_e	A	50
110 V	I_e	A	50
220 V	I_e	A	25
440 V	I_e	A	0,6
DC–5 operation			
60 V	I_e	A	50
110 V	I_e	A	50
220 V	I_e	A	25
440 V	I_e	A	0,6
Current heat loss (3–pole)			
Current heat loss at I_{th}		W	11,3
Current heat loss at I_e to AC–3/400 V		W	7,2
Impedance per pole		m&	1,5
Magnet systems			
Voltage tolerance			
AC operated			
AC operated	Pick–up	× U_c	0,8 – 1,1
Drop–out voltage AC operated			
Drop–out voltage AC operated	Abfall	× U_c	0,3 – 0,6
DC operated			
DC operated	Pick–up	× U_c	0,7 – 1,2
DC operated			
DC operated	Abfall	× U_c	0,15–0,6
Power consumption of the coil in a cold state and 1.0 × U_c			
50 Hz	Pick–up	VA	130
50 Hz	Pick–up	W	80
50 Hz	Sealing	VA	14
50 Hz	Sealing	W	4
DC operated	Pick–up	W	24 at 24 V
DC operated	Sealing	W	0.5 at 24 V
Duty factor		% DF	100
Switching times at 100 % U_c (approximate values)			
Main contacts			
AC operated			
Closing delay		ms	25
Opening delay		ms	25
DC operated			
Closing delay		ms	60
Opening delay		ms	20
Arcing time		ms	10
Electromagnetic compatibility (EMC)			
Emitted interference			to EN 60947–1
Interference immunity			to EN 60947–1

Mounting position, AC– and DC operated



Moeller GmbH, Hein–Moeller–Str. 7–11, D–53115 Bonn
E–Mail: catalog@moeller.net, Internet: www.moeller.net, http://catalog.moeller.net