



MOTOR PROTECTION, START.PKZM0



Powering Business Worldwide™

Part no. PKZM0-16

Article no. 046938

Delivery programme

Product range			PKZM0 motor protective circuit-breakers up to 32 A
Basic function			Motor protection
Connection technique			Screw terminals
Max. motor rating			
AC-3			
220 V 230 V 240 V			
220 V 230 V	P	kW	4
380 V 400 V 415 V			
380 V 400 V	P	kW	7.5
440 V	P	kW	9
500 V	P	kW	9
660 V 690 V			
660 V 690 V	P	kW	12.5
Rated uninterrupted current	I_u	A	16
Setting range			
Overload releases	I_r	A	10 - 16
Short-circuit releases			
max.	I_{rm}	A	224

Notes

Phase failure sensitivity to IEC/EN 60947-4-1, VDE 0660 part 102.
Can be snap-fit to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height



PTB 10 ATEX 3013, see manual

Approvals

Product Standards
UL File No.
UL CCN
CSA File No.
CSA Class No.
NA Certification
Specially designed for NA
Suitable for

UL 508; CSA-C22.2 No. 14; IEC60947-4-1; CE marking

E36332

NLRV

12528

3211-05

UL listed, CSA certified

No

Branch circuit: Manual type E if used with terminal, or suitable for group installations

General

Standards			IEC/EN 60947, VDE 0660
Climatic proofing			Damp heat, constant to IEC 60068-2-78 Damp heat, cyclic to IEC 60068-2-30
Ambient temperature		°C	
Storage	θ	°C	-40 - +80
Open		°C	-25 - 55
Enclosed		°C	-25 - 40
Mounting position			
Direction of incoming supply			as required
Degree of protection			

Device			IP20
Terminations			IP00
Protection against direct contact			Finger and back-of-hand proof
Mechanical shock resistance half-sinusoidal shock 10 ms to IEC 60068-2-27		g	25
Altitude		m	2000
Terminal capacity screw terminals		mm ²	
Solid		mm ²	1 x (1 - 6) 2 x (1 - 6)
Flexible with ferrule to DIN 46228		mm ²	1 x (1 - 6) 2 x (1 - 6)
Solid or stranded		AWG	18 - 10
Terminal capacity springloaded terminals			
Solid		mm ²	1 x (1...2.5) 2 x (1...2.5)
Flexible with ferrule to DIN 46228		mm ²	1 x (1...2.5) 2 x (1...2.5)
Solid or stranded		AWG	18...14
Specified tightening torque for terminal screws			
Main cable		Nm	1.7
Control circuit cables		Nm	1

Main conducting paths

Rated impulse withstand voltage	U_{imp}	V AC	6000
Overvoltage category/pollution degree			III/3
Rated operational voltage	U_e	V AC	690
Rated uninterrupted current = rated operational current	$I_u = I_e$	A	32 or current setting of the overcurrent release
Rated frequency	f	Hz	40 - 60
Rated frequency		Hz	40 - 60
Current heat loss (3 pole at operating temperature)		W	6
Lifespan, mechanical	Operations	x 10 ⁶	0.1
Lifespan, electrical (AC-3 at 400 V)	Operations	x 10 ⁶	0.1
Maximum operating frequency		Ops./ h	
Max. operating frequency		Ops./ h	40
Short-circuit rating			
AC			→ Engineering
DC			
Short-circuit rating		kA	60
Short-circuit rating			60 (up to PKZM0-16) 40 (PKZM0-20 to PKZM0-32)
Motor switching capacity		kA _{rms}	
AC-3 (up to 690 V)		A	32
DC-5 (up to 250 V)		A	25 (3 contacts in series)

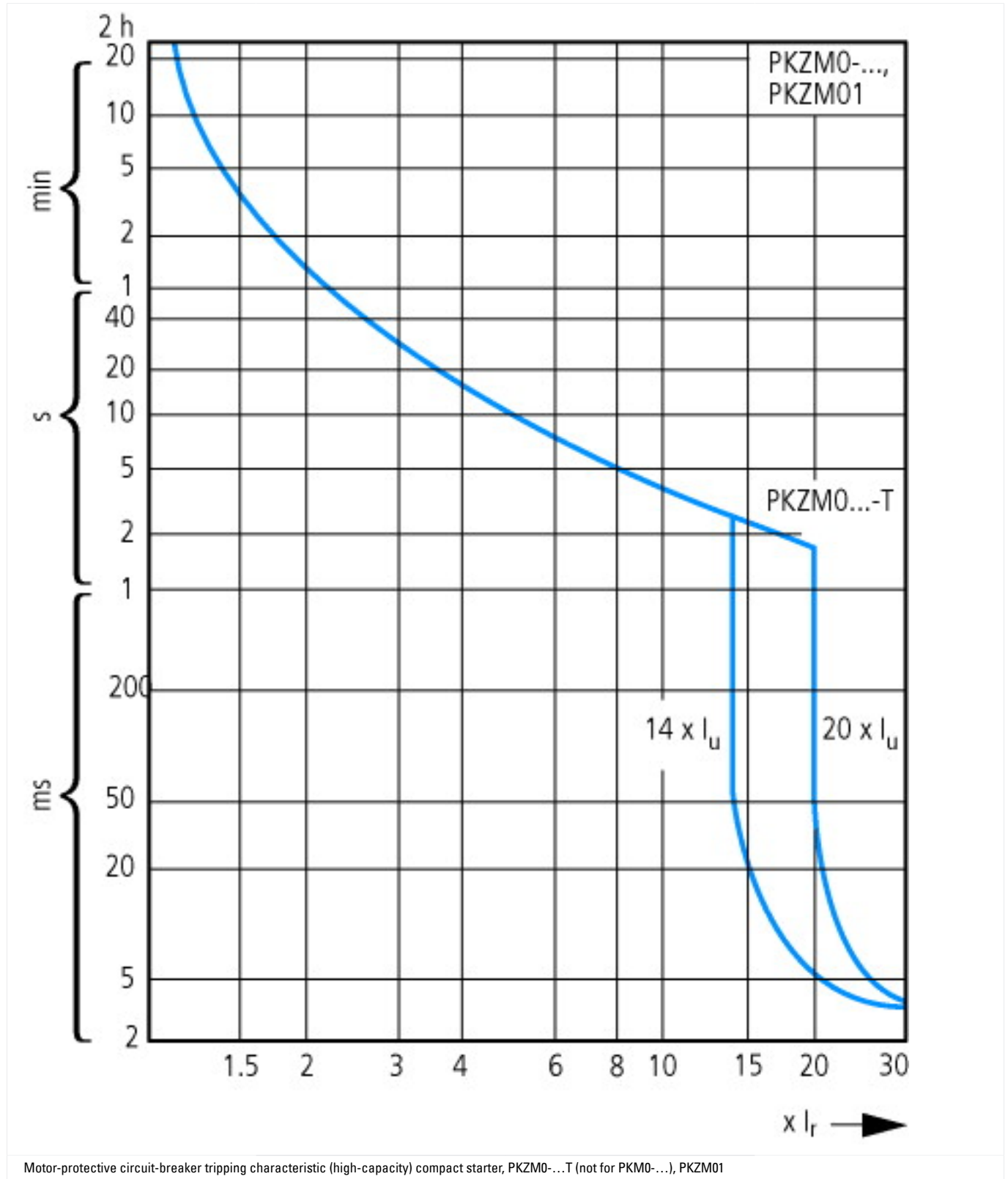
Trip blocks

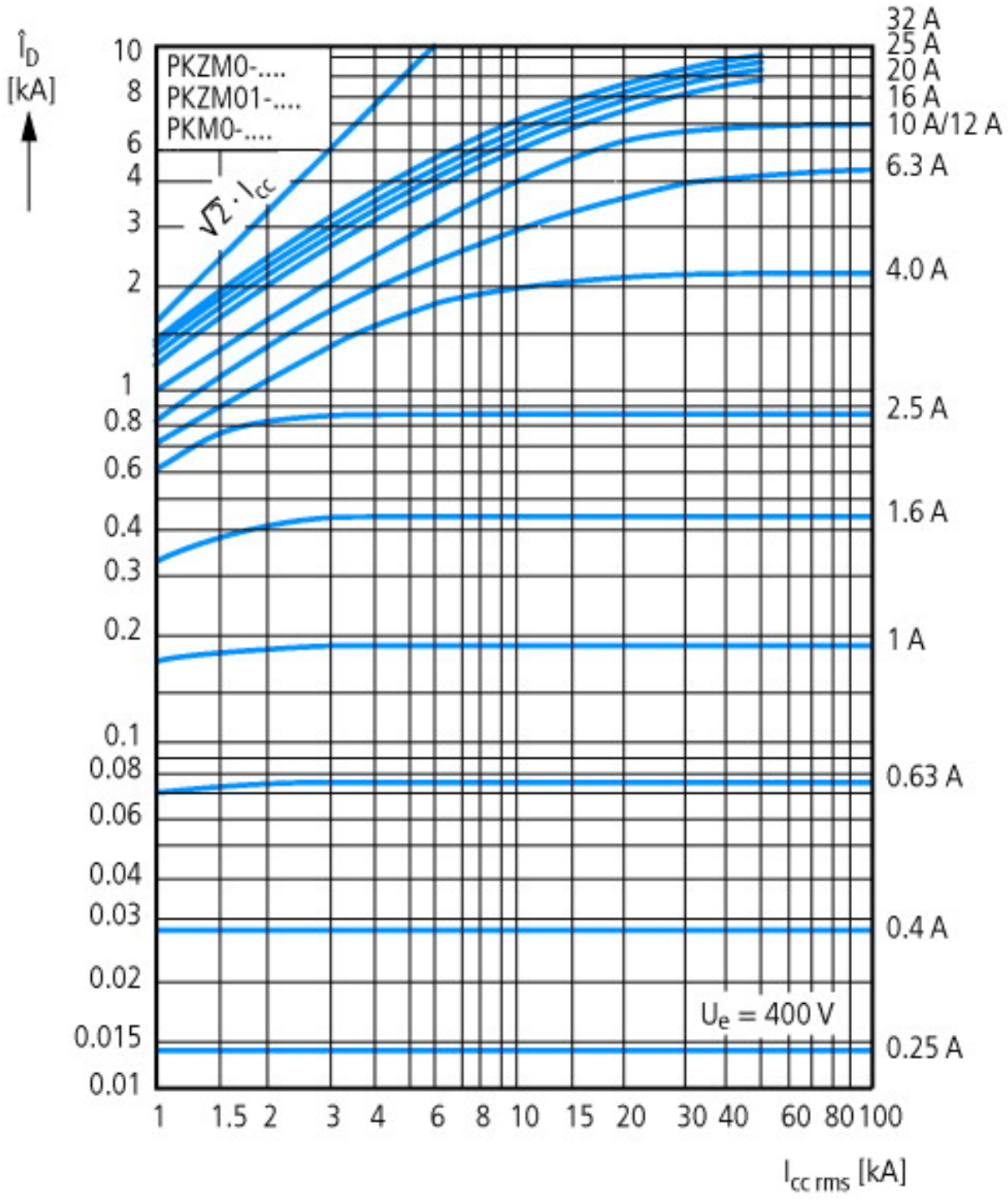
Temperature compensation			
to IEC/EN 60947, VDE 0660		°C	- 5 ... 40
Operating range		°C	- 25 ... 55
Temperature compensation residual error for T > 40 °C			$\frac{\Delta I_{tr}}{I_{tr}}$ 0.25%/K
Setting range of overload releases		x I_u	0.6 - 1
Short-circuit release fixed		x I_u	14
Fixed short-circuit release			Basic device 14 x I_u
Short-circuit release tolerance			± 20%
Phase-failure sensitivity			IEC/EN 60947-1-1, VDE 0660 Part 102

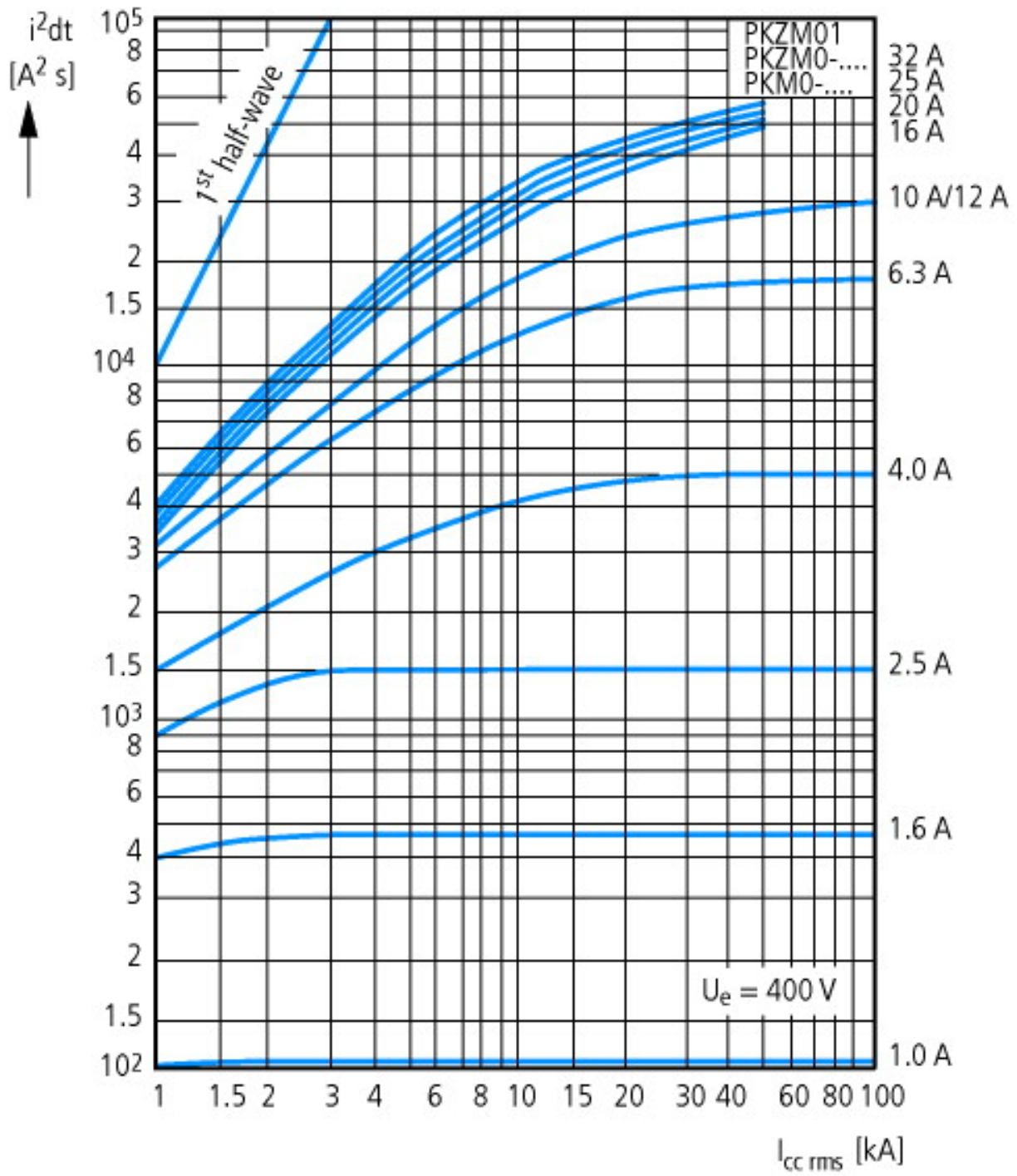
Technical data ETIM 4.0

Rated operation power at AC-3, 400 V		kWh	7.5
With integrated auxiliary switch			No
Rated permanent current I_u		A	16
With integrated under voltage release			No
Number of poles			3
Degree of protection (IP)			IP20
Connection type main current circuit			Screw connection

Characteristics







Let-through characteristics

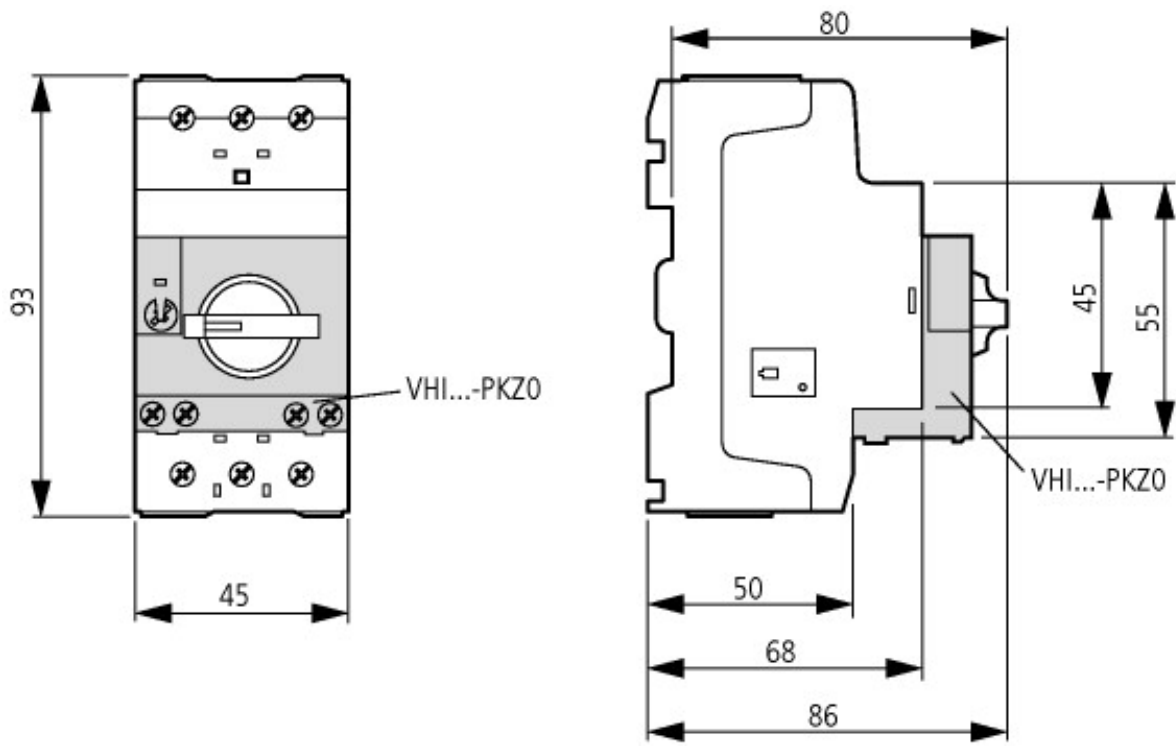
Dimensions



Motor-protective circuit-breaker with standard auxiliary contact
 PKZM0...(+NHI-E...-PKZ0)
 PKZM0...-T(+NHI-E...-PKZ0)
 PKM0...(+NHI-E...-PKZ0)



Motor-protective circuit-breakers with lockable rotary handles
 PKZM0...+AK-PKZ0



Motor-protective circuit-breakers with early-make auxiliary contacts
 PKZM0-...+VHI-...-PKZO

Additional product information (links)

IL03407010Z (AWA1210-2138) Motor-protective circuit-breaker

IL03407010Z (AWA1210-2138) Motor-protective circuit-breaker

ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407010Z2010_08.pdf

IL03407011Z (AWA1210-1925) Motor-protective circuit-breaker

IL03407011Z (AWA1210-1925) Motor-protective circuit-breaker

ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407011Z2010_08.pdf

MN03402003Z-DE/EN (AWB1210-1458) motor-protective circuit-breakers PKZM0, overload monitoring of Ex e motors

MN03402003Z-DE/EN (AWB1210-1458) motor-protective circuit-breakers PKZM0, overload monitoring of Ex e motors - Deutsch / English

ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN03402003Z_DE_EN.pdf

Motor starters and "Special Purpose Ratings" for the North American market

http://www.moeller.net/binary/ver_techpapers/ver953en.pdf

Busbar Component Adapters for modern Industrial control panels

http://www.moeller.net/binary/ver_techpapers/ver960en.pdf