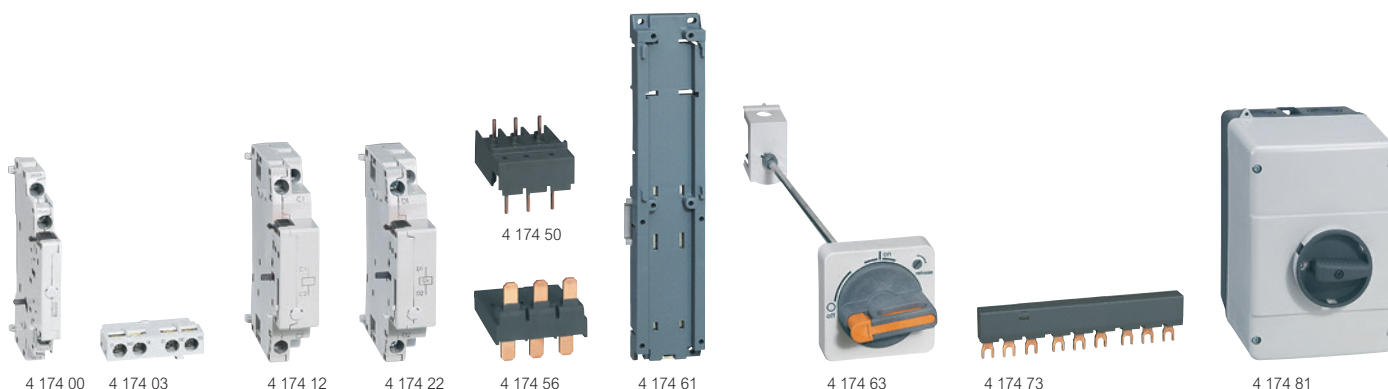


MPCBs MPX³

accessories







Pack	Cat. Nos	Accessories	Pack	Cat. Nos	Accessories
		Auxiliary contacts			Direct adaptator and mounting unit
		2-pole			For mounting CTX ³ contactors under MPX ³ MPCBs
		Side mounting			Direct adaptators
		Mounting on the left side of MPCBs			Used to connect MPX ³ directly with the contactor
		One module per MPCB	2	4 174 48	For MPX ³ 32S with CTX ³ 22 AC (p. 176)
2	4 174 00	1 NO + 1 NC	2	4 174 49	For MPX ³ 32S with CTX ³ 22 DC (p. 176)
2	4 174 01	2 NO	2	4 174 50	For MPX ³ 32H/32MA with CTX ³ 22 AC (p. 176)
2	4 174 02	2 NC	2	4 174 51	For MPX ³ 32H/32MA with CTX ³ 22 DC (p. 176)
		Front mounting	2	4 174 52	For MPX ³ 32S with CTX ³ 40 AC (p. 176)
		One module per MPCB	2	4 174 53	For MPX ³ 32S with CTX ³ 40 DC (p. 176)
10	4 174 03	1 NO + 1 NC	2	4 174 54	For MPX ³ 32H/32MA with CTX ³ 40 AC (p. 176)
10	4 174 04	2 NO	2	4 174 55	For MPX ³ 32H/32MA with CTX ³ 40 DC (p. 176)
10	4 174 05	2 NC	2	4 174 56	For MPX ³ 63H with CTX ³ 65 AC with lug type terminals (p. 176)
		Alarm contacts	2	4 174 57	For MPX ³ 63H with CTX ³ 65 DC with cage type terminals (p. 176)
		1 NO + 1 NC	1	4 174 58	For MPX ³ 100H with CTX ³ 100 AC with cage type terminals (p. 176)
		Any trip alarm contact	1	4 174 59	For MPX ³ 100H with CTX ³ 100 DC with cage type terminals (p. 176)
		Operate in case of trip			Mounting unit
		Mounting on the left side of MPCBs			This device is used for joining together MPX ³ MPCBs and CTX ³ contactors
		Set alarm contact first in case of using auxiliary contact together (MPX ³ 63H can not accept auxiliary contact and alarm contact together)			Screws not supplied
1	4 174 06	For MPX ³ 32	1	4 174 60	For MPX ³ 32S/32H/32MA
1	4 174 08	For MPX ³ 63 and 100	1	4 174 61	For MPX ³ 63H
		Magnetic trip alarm contact	1	4 174 62	For MPX ³ 100H
		Operate in case of instantaneous trip			Rotary handle
		Mounting on the left side of MPCBs			Mounting on panel's door to control the MPX ³
		Set alarm contact first in case of using auxiliary contact together	1	4 174 63	For MPX ³ 32H and 32 MA
2	4 174 07	1 NO + 1 NC	1	4 174 64	For MPX ³ 63H
		Shunt release	1	4 174 65	For MPX ³ 100H
		Mounting on the right side of MPCBs			Phase busbar
		One release per MPCB			For parallel connection of MPX ³
1	4 174 10	24 V - 50 Hz / 28 V - 60 Hz			For MPX³ 32S, 32H and 32MA
1	4 174 11	110 V - 50 Hz / 120 V - 60 Hz	10	4 174 71	2 devices - rated current 63 A
1	4 174 12	220-230 V - 50 Hz / 240-260 V - 60 Hz	10	4 174 73	3 devices - rated current 63 A
1	4 174 13	380-400 V - 50 Hz / 440-460 V - 60 Hz	10	4 174 75	4 devices - rated current 63 A
		Undervoltage release	10	4 174 76	5 devices - rated current 63 A
		Mounting on the right side of MPCBs	4	4 174 77	Feeder for phase busbar - rated current 32 A
		One release per MPCB			For MPX³ 63H
		Without auxiliary contact			Rated current 108 A
1	4 174 20	24 V - 50 Hz / 28 V - 60 Hz	4	4 174 72	2 devices
1	4 174 21	110 V - 50 Hz / 120 V - 60 Hz	4	4 174 74	3 devices
1	4 174 22	220-230 V - 50 Hz / 240-260 V - 60 Hz			Enclosures for MPX³ 32H and 32MA
1	4 174 23	380-400 V - 50 Hz / 440-460 V - 60 Hz			IP 65 enclosure to use in dusty areas as well as in presence of corrosive gas or liquid
		With 2 NO auxiliary contacts			Yellow/red rotary handle
1	4 174 30	Can not attach to MPX ³ 32S	1	4 174 80	With black rotary handle
1	4 174 31	24 V - 50 Hz / 28 V - 60 Hz	1	4 174 81	
1	4 174 32	110 V - 50 Hz / 120 V - 60 Hz			
1	4 174 33	220-230 V - 50 Hz / 240-260 V - 60 Hz			
1	4 174 33	380-400 V - 50 Hz / 440-460 V - 60 Hz			
		Dial Cover			
		Sealable cover to protect the set value from the operation that is not intended			
400	4 174 79	For all types of MPX ³			


MPCBs MPX³


technical characteristics

Terminals

			MPX ³ 32S	MPX ³ 32H / 32 MA	MPX ³ 63H	MPX ³ 100H
Conformity to standards			IEC60947 UL508, UL508 Type E			
Approvals			CE, UL			
Terminal parts						
Screwdriver						
Single-core	1 conductor	(mm ²) / (AWG)	1...10 / 18...8	1...10 / 18...8	0.75...35 / 18...2	2.5...70 / 12...2/0
	2 conductor	(mm ²) / (AWG)	1...6 / 18...10	1...6 / 18...10	0.75...25 / 18...4	2.5...50 / 12...1/0
Standard	1 conductor	(mm ²) / (AWG)	1...6 / 18...10	1...6 / 18...10	0.75...35 / 18...2	2.5...70 / 12...2/0
	2 conductor	(mm ²) / (AWG)	1...6 / 18...10	1...6 / 18...10	0.75...25 / 18...4	2.5...50 / 12...1/0
Flexible	1 conductor	(mm ²) / (AWG)	1...6 / 18...10	1...6 / 18...10	0.75...25 / 18...4	2.5...50 / 12...1/0
	2 conductor	(mm ²) / (AWG)	0.75...4 / 18...10	0.75...4 / 18...10	0.75...16 / 18...6	2.5...35 / 10...2
Tightening torque		(Nm) / (lb-in)	0.8...2.5 / 7...22	0.8...2.5 / 7...22	3...4.5 / 26...39	4...6 / 35...53

Auxiliaries

			Auxiliary contacts for front mounting		Auxiliary contacts for left side mounting		Alarm switch for left side mounting	
Rated thermal current / lth at 40 °C ambient temperature	(A)		5		10		10	
	(A)		3		6		6	
Contact class coordination according to NEMA (UL/CSA-Standards)	AC		A600		A600		A600	
	DC		Q300		Q300		Q300	
Back-up fuses gG, gL		(A)	16		16		16	
Rated supply current								
AC-15	(V)	-	240	24	240	24	240	
	(A)	-	3	6	4	6	4	
DC-13	(V)	24	220	24	220	24	220	
	(A)	1	0.1	2	0.25	2	0.25	
Weight (g)			18		30		40	
Terminal parts								
Screwdriver					Pozi driv size 2			
Single-core	1 conductor	(mm ²) / (AWG)	0.5...2.5 / 20...14		0.5...2.5 / 20...14			
	2 conductor	(mm ²) / (AWG)	-		0.5...2.5 / 20...14			
Standard	1 conductor	(mm ²) / (AWG)	0.5...4 / 20...10		0.5...4 / 20...10			
	2 conductor	(mm ²) / (AWG)	0.75...2.5 / 18...14		0.75...2.5 / 18...14			
Tightening torque		(Nm) / (lb-in)	0.8...1.2 / 7...10		0.8...1.2 / 7...10			

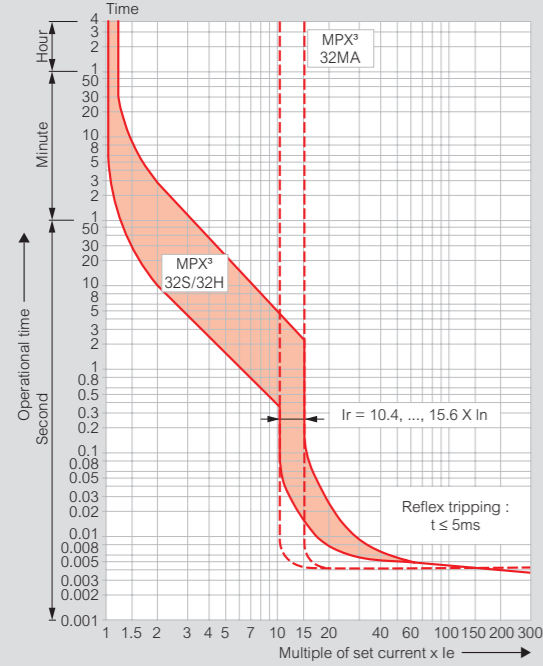
			Undervoltage release for right side mounting	Undervoltage release with 2 auxiliary contacts for right side mounting	Shunt release for right side mounting
Actuating voltage	Pull-in		0.7...1.1 x Us	0.85...1.1 x Us	0.85...1.1 x Us
	Drop-out			0.7...0.35 x Us	0.7...0.35 x Us
Rated control voltage	min:		24 V 50 Hz / 28 V 60 Hz	24 V 50 Hz / 28 V 60 Hz	24 V 50 Hz / 28 V 60 Hz
	max:		415-440 V 50 Hz / 460-480 V 60 Hz	415-440 V 50 Hz / 460-480 V 60 Hz	415-440 V 50 Hz / 460-480 V 60 Hz
Coil rating	Pull-in		8.5 VA, 6 W	8.5 VA, 6 W	8.5 VA, 6 W
	Hold		3 VA, 12 W	3 VA, 12 W	3 VA, 12 W
Opening time (ms)			-	20	20
Weight (g)			18	30	40
Terminal parts					
Screwdriver			Pozi driv size 2		
Single-core	1 conductor	(mm ²) / (AWG)	0.5...2.5 / 20...14		
	2 conductor	(mm ²) / (AWG)	0.5...2.5 / 20...14		
Standard	1 conductor	(mm ²) / (AWG)	0.5...4 / 20...10		
	2 conductor	(mm ²) / (AWG)	0.75...2.5 / 18...14		
Tightening torque		(Nm) / (lb-in)	0.8...1.2 / 7...10		

MPCBs MPX³

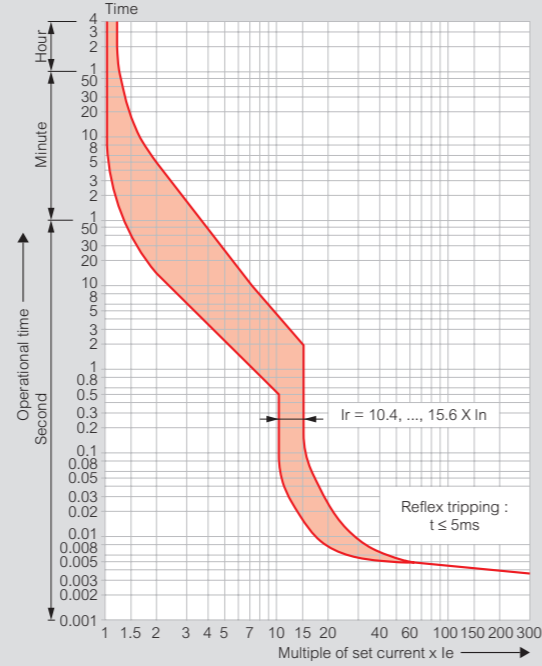
curves

Tripping curves

MPX³ 32S / 32H / 32MA



MPX³ 63H / 100H



1) Thermal release trip current :

The adjustable inverse bimetal trip reliability protects motors against overloads. The curve shows the mean operating current at an ambient temperature of 20 °C starting from cold. Careful testing and setting ensures effective motor protection even in the case of single-phasing.

2) Current setting Ie :

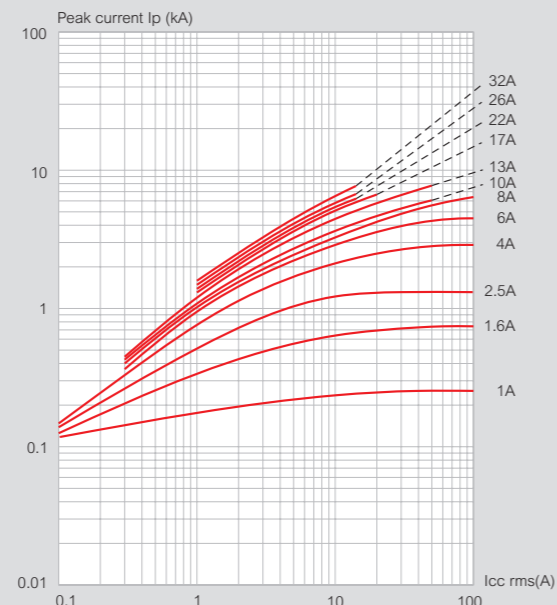
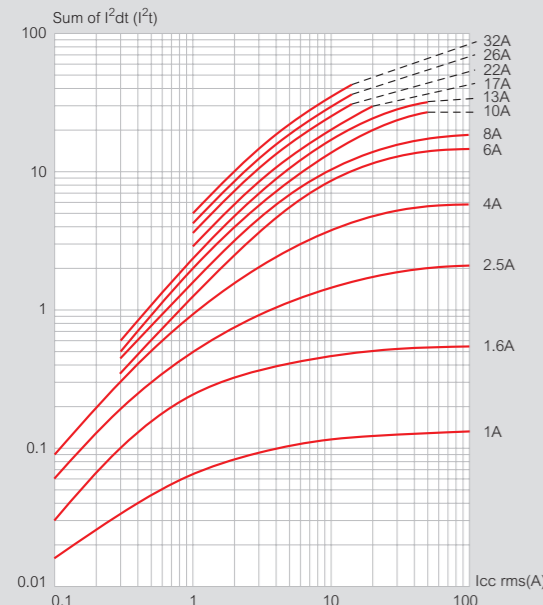
The overload trip corresponds to a thermal overload relay in a motor starter conforming to IEC 947-4-1. If a different value is prescribed (e.g. reduced Ie for cooling medium having a temperature higher than 40 °C or a place of installation higher than 2000m above sea level), the setting current is equal to the reduced rated current Ie of the motor, as per manufacturer specifications. When the MCPB is used outside the standard air temperature range (-5°C to +40°C) the thermal release needs to be calibrated by one point: one point lower from -20°C to -5°C and one point higher from +40°C to +60°C.

3) Magnetic release trip current :

The instantaneous magnetic trip has a fixed operating current setting. This corresponds to 13 times the maximum value of setting range, at a lower setting it is correspondingly higher.

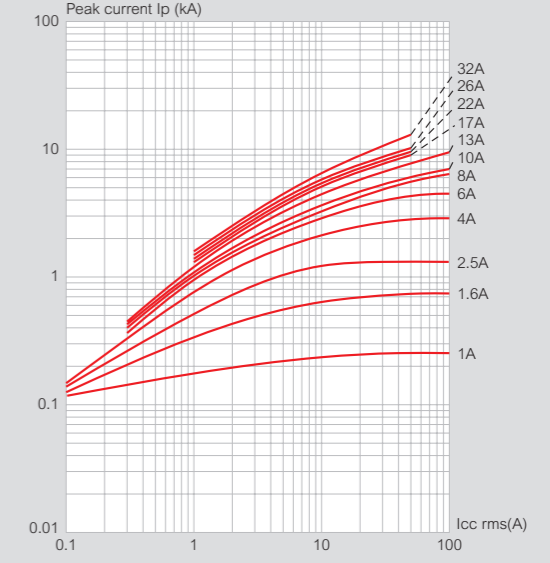
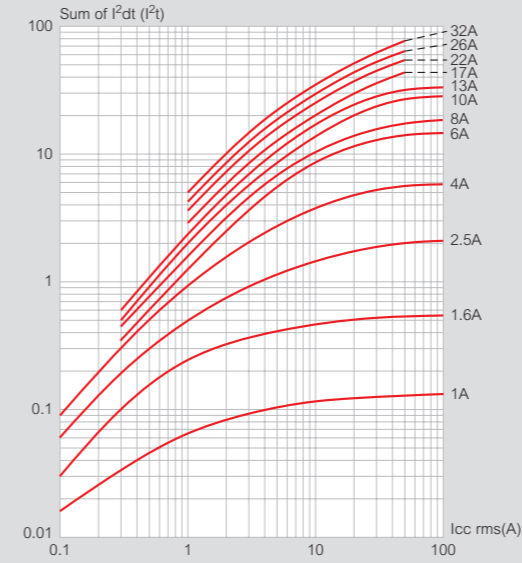
Thermal limit in kA²s in the magnetic operating zone (Ue=415V)

MPX³ 32S

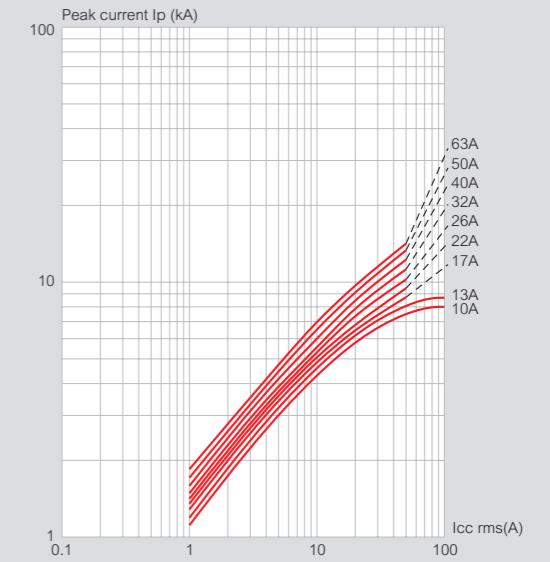
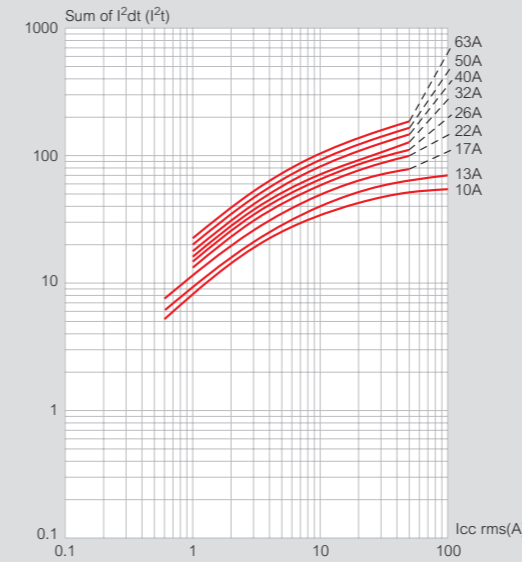


Thermal limit in kA²s in the magnetic operating zone (Ue=415V) (continued)

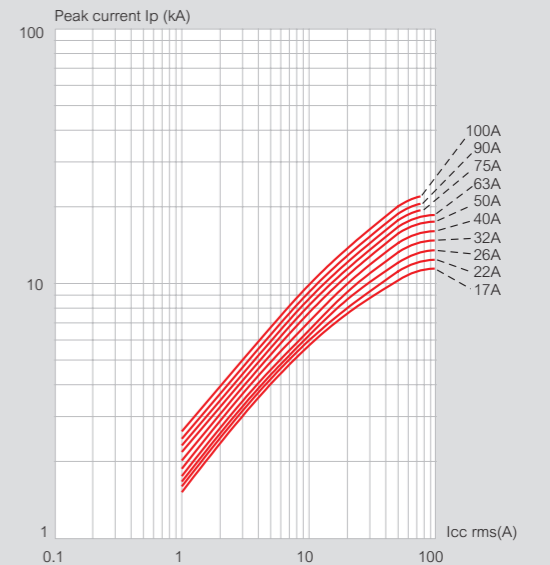
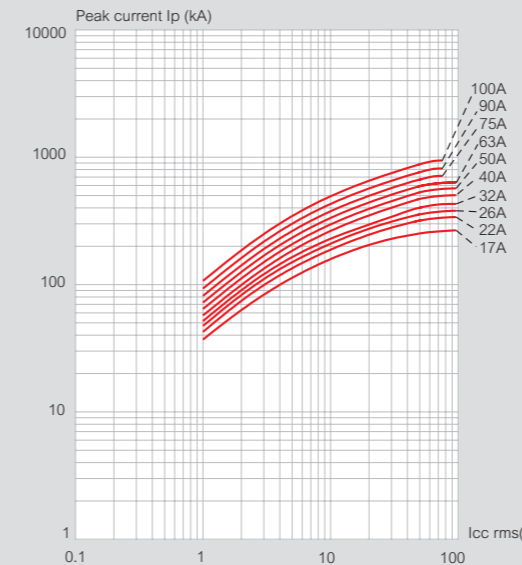
MPX³ 32H / 32MA



MPX³ 63H



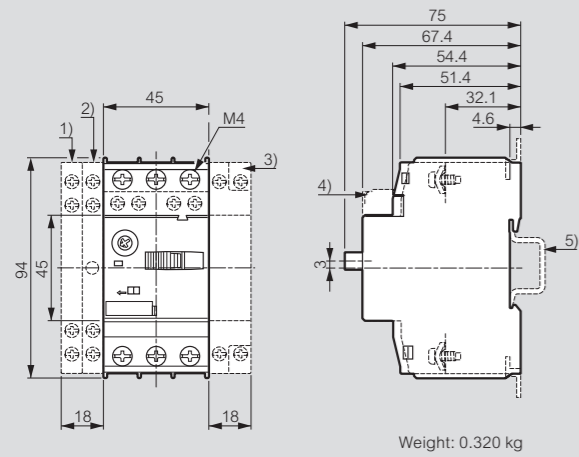
MPX³ 100H



MPCBs MPX³

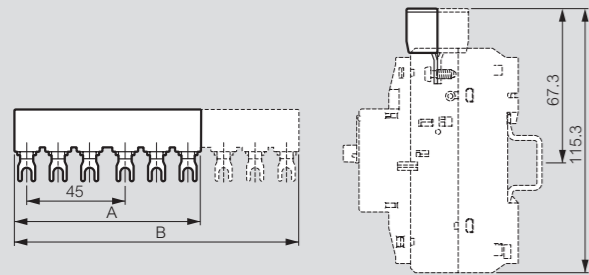
dimensions

MPX³ 32S



Weight: 0.320 kg

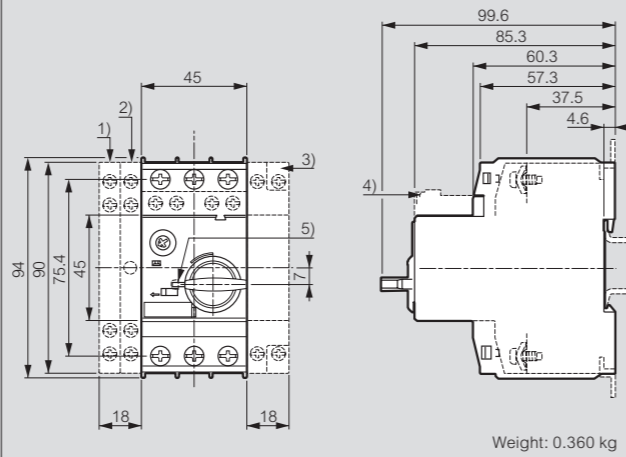
- 1) Side auxiliary contact
- 2) Side magnetic trip alarm contact
- 3) Side shunt release or Side undervoltage release
- 4) Front auxiliary contact
- 5) 35 mm standard mounting rail acc. to EN 50 022



Cat.No	Numbers of MPX ³	A ⁽¹⁾ (mm)	B (mm)
4 174 71	2	85	-
4 174 73	3	-	130
4 174 75	4	-	175
4 174 76	5	-	220

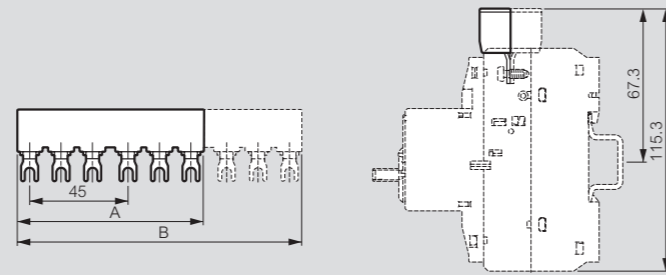
(1) Only for Cat.No 4 174 71

MPX³ 32H / 32MA



Weight: 0.360 kg

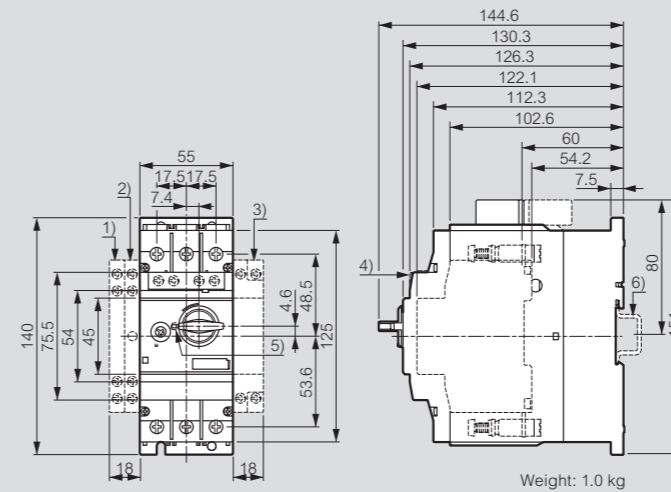
- 1) Side auxiliary contact
- 2) Side magnetic trip alarm contact
- 3) Side shunt release or Side undervoltage release
- 4) Front auxiliary contact
- 5) Handle lock in OFF position (Ø 5 mm)
- 6) 35 mm standard mounting rail acc. to EN 50 022



Cat.No	Numbers of MPX ³	A ⁽¹⁾ (mm)	B (mm)
4 174 71	2	85	-
4 174 73	3	-	130
4 174 75	4	-	175
4 174 76	5	-	220

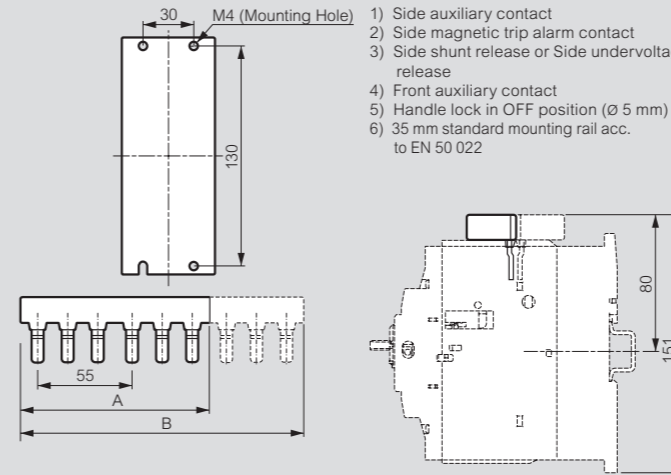
(1) Only for Cat.No 4 174 71

MPX³ 63H



Weight: 1.0 kg

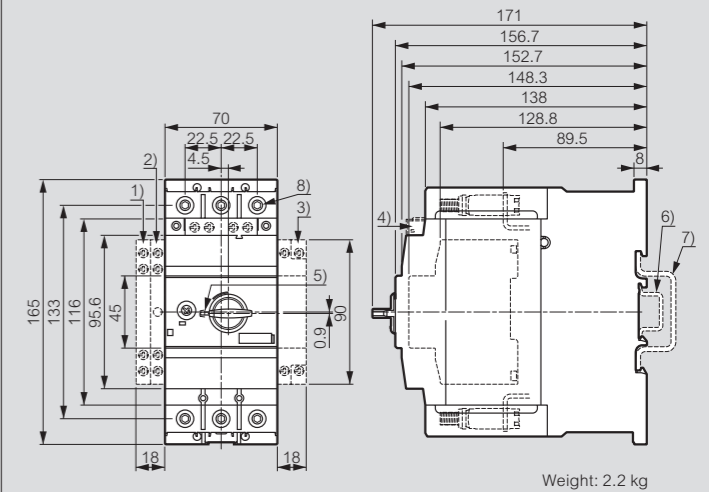
- 1) Side auxiliary contact
- 2) Side magnetic trip alarm contact
- 3) Side shunt release or Side undervoltage release
- 4) Front auxiliary contact
- 5) Handle lock in OFF position (Ø 5 mm)
- 6) 35 mm standard mounting rail acc. to EN 50 022



Cat.No	Numbers of MPX ³	A ⁽¹⁾ (mm)	B (mm)
4 174 72	2	110	-
4 174 74	3	-	165

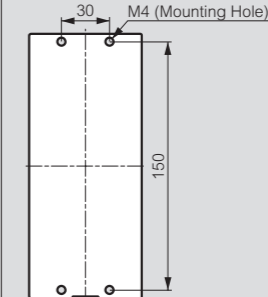
(1) Only for Cat.No 4 174 72

MPX³ 100H



Weight: 2.2 kg

- 1) Side auxiliary contact
- 2) Side magnetic trip alarm contact
- 3) Side shunt release or Side undervoltage release
- 4) Front auxiliary contact
- 5) Handle lock in OFF position (Ø 5 mm)
- 6) 35 mm standard mounting rail acc. to EN 50 022
- 7) 75 mm standard mounting rail acc. to EN 50 023
- 8) 4 mm hexagon socket screw

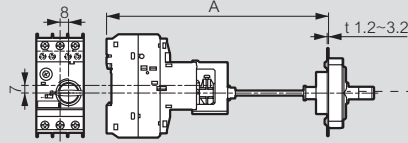


MPCBs MPX³

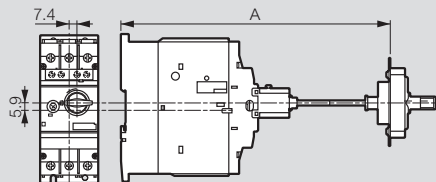
dimensions (continued)

External Handle

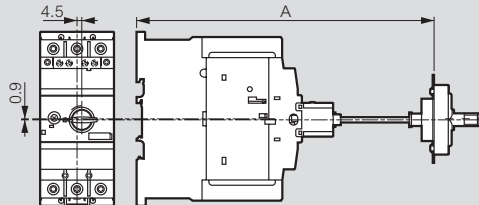
MPX³ 32H / 32MA - Cat.No 4 174 63



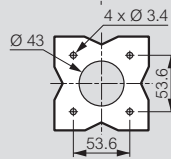
MPX³ 63H - Cat.No 4 174 64



MPX³ 100H - Cat.No 4 174 65

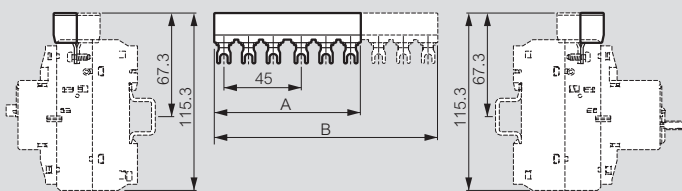


Cat.Nos	A (mm)	MMS Type
4 174 63	min: 148.6	MPX ³ 32H / 32MA
	max: 410.6 (Shaft 315mm)	
4 174 64	min: 193.6	MPX ³ 63H
	max: 455.6 (Shaft 315mm)	
4 174 65	min: 220	MPX ³ 100H
	max: 482 (Shaft 315mm)	

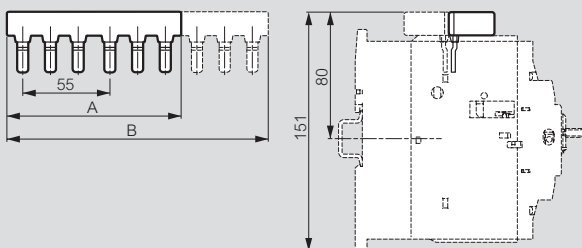


Phase Bus

Cat.Nos 4 174 71/73/75/76



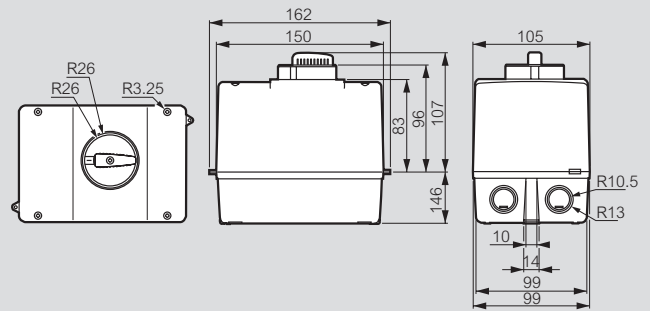
Cat.Nos 4 174 72/74



Cat.Nos	Number of MPX ³	A (mm)	B (mm)
4 174 71	2	85	-
4 174 72	3	-	130
4 174 73	2	110	-
4 174 74	3	-	165
4 174 75	4	-	175
4 174 76	5	-	220

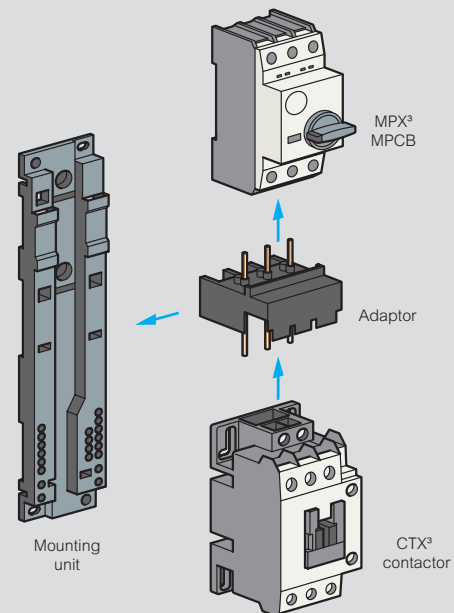
Enclosure

Cat.Nos 4 174 80/81



Mounting units - installation principle

Cat.Nos 4 174 60/61/62



MPX ³ MPCB	CTX ³ contactor	Adaptor	Mounting unit
MPX ³ 32S	CTX ³ mini ~	4 174 40	4 174 60
	CTX ³ mini =	4 174 41	
	CTX ³ 22 ~	4 174 48	
	CTX ³ 22 =	4 174 49	
	CTX ³ 40 ~	4 174 52	
MPX ³ 32H/MA	CTX ³ 40 =	4 174 53	
	CTX ³ mini ~	4 174 42	
	CTX ³ mini =	4 174 43	
	CTX ³ 22 ~	4 174 50	
	CTX ³ 22 =	4 174 51	
MPX ³ 63H	CTX ³ 40 ~	4 174 54	
	CTX ³ 40 =	4 174 55	
	CTX ³ 65 ~	4 174 56	
MPX ³ 100H	CTX ³ 65 =	4 174 57	
	CTX ³ 100 ~	4 174 58	4 174 62
	CTX ³ 100 =	4 174 59	