



Molded Case Circuit Breaker Specifications

Bulletin 140UT

Topic	Page
Summary of Changes	2
Product Overview	3
Cat. No. Explanation	3
Product Selection	4
Accessories	5
Specifications	9
Approximate Dimensions	13
Additional Resources	15

Summary of Changes

This publication contains the following new or updated information. This list includes substantive updates only and is not intended to reflect all changes.

Topic	Page
Corrected 480Y/277V ratings for the following cat. nos. • 140UT-D7D2-C35 • 140UT-D7D2-C40 • 140UT-D7D3-C35 • 140UT-D7D3-C40	4

Product Overview

The Bulletin 140UT-D Molded Case Circuit Breaker (MCCB) UL489 and IEC 60947-2 Listed circuit breaker for global applications. The current-limiting circuit breaker provides fixed short-circuit and overcurrent protection and offers high interrupting ratings for 2- and 3-pole devices. These are also suitable for backfeeding.

Accessories are designed to be field installed. The compact busbars and feeder blocks reduce wiring errors and installation cost. Connection modules for 100-C contactors simplify wiring and can reduce the number of DIN Rails required, reducing panel space even further.



Product Applications

- Feeder Circuits
 - Small cabinets
 - Distribution panels
 - Branch circuit protection
 - Transformers
 - Heaters
- Control Circuits
 - Control Transformers
 - Power supplies
- Heating, air conditioning and refrigeration (HACR)
- High-intensity discharge
- Switching duty (SWD) 15 and 20 A

Cat. No. Explanation

140UT - D 7 D2 - B60
a b c d e

a		b		c		d		e	
Bulletin Number		Current Rating/ Frame Size		Interrupting Rating/ Breaking Capacity		Function		Current Range	
Code	Description	Code	Description	Code	Description	Code	Description	Code	Description
140UT	140UT Molded CaseCircuit Breaker (UL 489)	D	40 A, Frame D	7	UL 489	D2	Fixed Thermal/Fixed Magnetic (15...20x I_n), 2-pole	A	0.10 (example: A16 = 0.16 A)
						D3	Fixed Thermal/Fixed Magnetic (15...20x I_n), 3-pole	B	1.0 (example: B16 = 1.6 A)
								C	10 (example: C16 = 16 A)

Product Selection

Table 1 - 2-Pole Thermal-magnetic MCCBs, Fixed Thermal-Fixed Magnetic

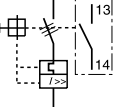
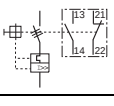
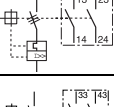
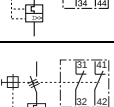
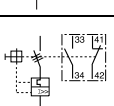
Rated Current I_n [A]	Rated Magnetic Tripping Current	Rated Ultimate Short-circuit Breaking Capacity I_{cu} [kA]				Rated Service Short-circuit Breaking Capacity I_{cs} [kA]				Interrupting Rating, Max RMS Symmetrical [kA]			Cat. No.
		230/240V	400/415V	500/525V	690V	230/240V	400/415V	500/525V	690V	240V	480Y/277V	600Y/347V	
0.5	$15...20 \times I_n$	100	100	100	100	100	100	100	100	100	100	50	140UT-D7D2-A50
1.0	$15...20 \times I_n$	100	100	100	100	100	100	100	100	100	100	50	140UT-D7D2-B10
2.0	$15...20 \times I_n$	100	100	100	18	100	100	100	10	100	100	50	140UT-D7D2-B20
3.0	$15...20 \times I_n$	100	100	100	6	100	100	100	4	100	100	50	140UT-D7D2-B30
4.0	$15...20 \times I_n$	100	100	100	6	100	100	100	4	100	100	50	140UT-D7D2-B40
5.0	$15...20 \times I_n$	100	100	100	6	100	100	100	4	100	100	50	140UT-D7D2-B50
6.0	$15...20 \times I_n$	100	100	100	6	100	100	100	3	100	100	50	140UT-D7D2-B60
8.0	$15...20 \times I_n$	100	100	100	6	100	100	100	3	100	100	50	140UT-D7D2-B80
10	$15...20 \times I_n$	100	100	100	6	100	100	100	3	100	100	50	140UT-D7D2-C10
12	$15...20 \times I_n$	100	100	50	6	100	50	25	3	65	65	25	140UT-D7D2-C12
15	$15...20 \times I_n$	100	100	50	6	100	25	10	3	65	65	25	140UT-D7D2-C15
20	$15...20 \times I_n$	100	65	35	6	100	25	10	3	65	65	—	140UT-D7D2-C20
25	$15...20 \times I_n$	65	65	35	4	50	25	10	3	65	65	—	140UT-D7D2-C25
30	$15...20 \times I_n$	65	65	25	4	50	25	6	3	65	65	—	140UT-D7D2-C30
35	$14 \times I_n$	50	50	25	4	35	20	4	2	65	30	—	140UT-D7D2-C35
40	$12 \times I_n$	50	50	25	4	35	20	4	2	65	30	—	140UT-D7D2-C40

Table 2 - 3-Pole Thermal-magnetic MCCBs, Fixed Thermal-Fixed Magnetic

Rated Current I_n [A]	Rated Magnetic Tripping Current	Rated Ultimate Short-circuit Breaking Capacity I_{cu} [kA]				Rated Service Short-circuit Breaking Capacity I_{cs} [kA]				Interrupting Rating, Max RMS Symmetrical [kA]			Cat. No.
		230/240V	400/415V	500/525V	690V	230/240V	400/415V	500/525V	690V	240V	480Y/277V	600Y/347V	
0.5	$15...20 \times I_n$	100	100	100	100	100	100	100	100	100	100	50	140UT-D7D3-A50
1.0	$15...20 \times I_n$	100	100	100	100	100	100	100	100	100	100	50	140UT-D7D3-B10
2.0	$15...20 \times I_n$	100	100	100	18	100	100	100	10	100	100	50	140UT-D7D3-B20
3.0	$15...20 \times I_n$	100	100	100	6	100	100	100	4	100	100	50	140UT-D7D3-B30
4.0	$15...20 \times I_n$	100	100	100	6	100	100	100	4	100	100	50	140UT-D7D3-B40
5.0	$15...20 \times I_n$	100	100	100	6	100	100	100	4	100	100	50	140UT-D7D3-B50
6.0	$15...20 \times I_n$	100	100	100	6	100	100	100	3	100	100	50	140UT-D7D3-B60
8.0	$15...20 \times I_n$	100	100	100	6	100	100	100	3	100	100	50	140UT-D7D3-B80
10	$15...20 \times I_n$	100	100	100	6	100	100	100	3	100	100	50	140UT-D7D3-C10
12	$15...20 \times I_n$	100	100	50	6	100	50	25	3	65	65	25	140UT-D7D3-C12
15	$15...20 \times I_n$	100	100	50	6	100	25	10	3	65	65	25	140UT-D7D3-C15
20	$15...20 \times I_n$	100	65	35	6	100	25	10	3	65	65	—	140UT-D7D3-C20
25	$15...20 \times I_n$	65	65	35	4	50	25	10	3	65	65	—	140UT-D7D3-C25
30	$15...20 \times I_n$	65	65	25	4	50	25	6	3	65	65	—	140UT-D7D3-C30
35	$14 \times I_n$	50	50	25	4	35	20	4	2	65	30	—	140UT-D7D3-C35
40	$12 \times I_n$	50	50	25	4	35	20	4	2	65	30	—	140UT-D7D3-C40

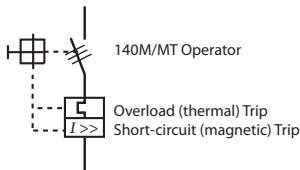
Accessories

Auxiliary Contacts

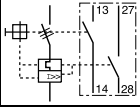
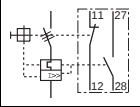
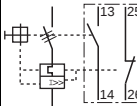
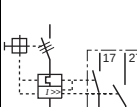
Description	Operator Position ⁽¹⁾			Term. No.	Contact Description	Connection Diagram ⁽²⁾	For Use With	Cat. No.
	OFF	ON	Tripped					
 Front-Mounted Auxiliary Contact 1-pole or 2-pole - No additional space required - Only one per device				13-14	N.O. Aux		140MT-C, D 140UT-D	140MT-C-AFA10
	0	X	0	13-14	N.O. Aux		140MT-C, D 140UT-D	140MT-C-AFA11
	X	0	X	21-22	N.C. Aux		140MT-C, D 140UT-D	140MT-C-AFA20
	0	X	0	13-14	N.O. Aux		140MT-C, D 140UT-D	140MT-C-AFA20
	0	X	0	23-24	N.O. Aux		140MT-C, D 140UT-D	140MT-C-AFA20
 Right Side-Mounted Auxiliary Contact 2-pole - Adds 9 mm to the width of the device - One per device - Not suitable for UL 489 applications	0	X	0	33-34	N.O. Aux		140MT-C, D 140UT-D	140MT-C-ASA20
	0	X	0	43-44	N.O. Aux		140MT-C, D 140UT-D	140MT-C-ASA20
	X	0	X	31-32	N.C. Aux		140MT-C, D 140UT-D	140MT-C-ASA02
	X	0	X	41-42	N.C. Aux		140MT-C, D 140UT-D	140MT-C-ASA02
	0	X	0	33-34	N.O. Aux		140MT-C, D 140UT-D	140MT-C-ASA11
	X	0	X	41-42	N.C. Aux		140MT-C, D 140UT-D	140MT-C-ASA11

(1) X = Contact Closed; 0 = Contact Open

(2) Connection Diagram Reference:

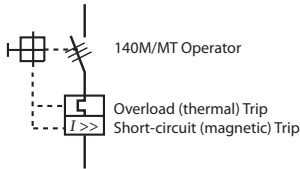


Trip Contacts

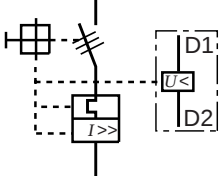
Description		Operator Position ⁽¹⁾			Term. No.	Contact Description	Connection Diagram ⁽²⁾	For Use With	Cat. No.
		OFF	ON	Tripped					
									
 Front-Mounted Trip Contact • 2-pole • Indicates tripping of device • No additional space required	0	X	0	13-14	N.O. Aux		140MT-C, D 140UT-D	140MT-C-AFAR10A10	
	0	0	X	27-28	N.O. Trip (short-circuit and overload)				
	X	0	X	11-12	N.C. Aux		140MT-C, D 140UT-D	140MT-C-AFAR10A01	
	0	0	X	27-28	N.O. Trip (short-circuit and overload)				
	0	X	0	13-14	N.O. Aux		140MT-C, D 140UT-D	140MT-C-AFAR01A10	
	X	X	0	25-26	N.C. Trip (short-circuit and overload)				
	0	0	X	17-18	N.O. Trip (short-circuit and overload)			140MT-C-AFAR10M10	
	0	0	X	27-28	N.O. Trip (short-circuit)				

(1) X = Contact Closed; 0 = Contact Open

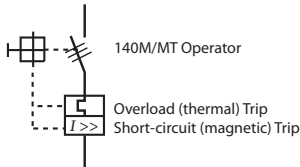
(2) Connection Diagram Reference:



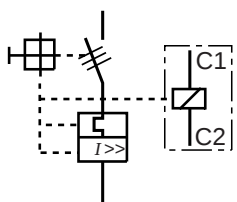
Undervoltage Trip Units

Description	Connection Diagram ⁽¹⁾	Trip Rating	For Use With	Cat. No.
 Undervoltage Trip • Left-side mounted • Adds 18 mm to the width of the device • Automatically trips MPCB/MCP when voltage falls below 35...70%		24V, 50 Hz/24...28V, 60 Hz	140MT-C, D 140UT-D (UL 489 applications up to 30 A)	140MT-C-UXK
		110V, 50 Hz; 120V, 60 Hz		140MT-C-UXD
		220...230V, 50 Hz		140MT-C-UXF
		240...260V, 60 Hz		140MT-C-UXA
		380...400V, 50 Hz		140MT-C-UXN
		480V, 60 Hz/415V, 50 Hz		140MT-C-UXB

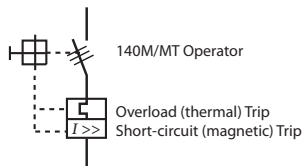
(1) Connection Diagram Reference:



Shunt Trip Units

Description	Connection Diagram ⁽¹⁾	Trip Rating	For Use With	Cat. No.
 Shunt Trip - Left-side mounted - Adds 18 mm to the width of the device - Provides remote tripping of the MPCB/MCP - Maximum on time for DC operated devices: 5 sec.		24V, 50 Hz/24...28V, 60 Hz	140MT-C, D 140UT-D (UL 489 applications up to 30 A)	140MT-C-SNK
		110V, 50 Hz/120V, 60 Hz		140MT-C-SND
		220...230V, 50 Hz		140MT-C-SNF
		240...260V, 60 Hz		140MT-C-SNA
		240V, 50 Hz; 277V, 60 Hz		140MT-C-SNT
		380...400V, 50 Hz		140MT-C-SNN
		480V, 60 Hz/415V, 50 Hz		140MT-C-SNB
		24V DC		140MT-C-SNZJ

(1) Connection Diagram Reference:



Additional Accessories

	Description	For Use With	Cat. No.	
	Anti-Tamper Shield - Provides protection against inadvertent adjustment of the current setting - Must be ordered in multiples of 10 (10 pieces/package)	140MT-C, D	140MT-C-CA	
	Lockable Twist Knob - For one padlock 5 mm (3/16 in.) diameter shackle - Can be locked in OFF position	Blue	140MT-C-KB	
		Black	140MT-C, D 140UT- D	140MT-C-KN
		Red/Yellow	140MT-C-KRY	
	Locking Tag - Padlock attachment to the lockable handles - Up to three padlocks 4...8 mm (5/16 in.) diameter shackle	140MT-C-KN1 140MT- C-KRY1	140MT-C-M3	
	Door Coupling Handle - For 3 padlocks 4...8 mm (5/16 in.) in diameter - IP66 Protection/Type 1, 4, 4X, 12 Interlock override capability - Can be modified for locking in ON position - Ships with coupling — order extension shaft and legend plate separately	Black	140MT-C, D 140UT- D	140MT-C-DN66
		Red/Yellow	140MT-C, D 140UT- D	140MT-C-DRY66
	Extension Shaft (Short length) - Cut to required length for mounting depth (front of DIN Rail to front of enclosure door) 140MT-C: 136 mm (5.35 in.) 140MT-D: 143 mm (5.63 in.) 140UT-D: 143 mm (5.63 in.) - For Cat. Nos. 140MT-C-DN66 and 140MT-C-DRY66 handles	140MT-C, D 140UT- D	140MT-C-DSS	
	Extension Shaft (Standard length) - Cut to required length for mounting depth (front of DIN Rail to front of enclosure door) 140MT-C: 136...358 mm (5.35...14.1 in.) 140MT-D: 143...364 mm (5.63...14.33 in.) 140UT-D: 143...364 mm (5.63...14.33 in.) - For Cat. Nos. 140MT-C-DN66 and 140MT-C-DRY66 handles		140MT-C-DS	
	Extension Shaft (Extended length) - Cut to required length for mounting depth (front of DIN Rail to front of enclosure door) 140MT-C: 136...507 mm (5.35...19.96 in.) 140MT-D: 143...513 mm (5.63...20.2 in.) 140UT-D: 143...513 mm (5.63...20.2 in.) - For Cat. Nos. 140MT-C-DN66 and 140MT-C-DRY66 handles		140MT-C-DSL	

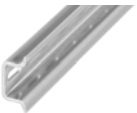
Additional Accessories (Continued)

	Description		For Use With	Cat. No.
	Door Coupling Handle - Type 3, 3R, 4, 4X, 12 (IP66) - For up to 2 padlocks - Fits in 30.5 mm cutout - Requires 140MT-C-DNC (140MT-C, 140MT-D, 140UT-D) or 140M-C-DNC (140M-F) coupler	Black	140MT-C, D 140UT-D	140MT-SB
		Red/Yellow	140MT-C, D 140UT-D	140MT-SY
	Extension Shaft Cut to required length for mounting depth (front of DIN Rail to front of enclosure door)	12 in. (30.48 cm)	140MT-SB, 140MT-SY	140MT-S1
		21 in. (53.34 cm)	140MT-SB, 140MT-SY	140MT-S2
	Coupler Included with Cat. Nos. 140MT-C-DN66 and 140MT-C-DRY66		140MT-C, D 140UT-D	140MT-C-DNC
	Extension Shaft Support - Provides consistent alignment of the 140M/MT-C-DS and 140M/MT-C-DSL shafts with the 140M/MT-C-DN66 or 140M/MT-C-DRY66 door coupling handles - Recommended for shaft lengths >200 mm - Snap on the right side of the 140MT-C, -D, 140M-F, or 140UT-D device and allows the addition of one side-mounted auxiliary contact. - Width: 9 mm. - For use with screw-mounted or hat rail mounted devices.		140MT-C, D 140UT-D	140MT-C-SHS
	Legend Plate	Marking: "Hauptschalter" and "Main Switch"	140MT-C-DN66	140MT-C-DFCN
		Marking: "Not-Aus" and "Emergency Off"	140MT-C-DRY66	140MT-C-DFCRY
			140M-C-DRY66	140M-C-DFCRY
	Screw Adapter - For screw arrangement of a motor protection circuit breaker - Must be ordered in multiples of 10 (10 pieces/pkg)		140MT-C, D 140UT-D	140MT-C-N45

Modules and Adapters

	Description	For Use With	Cat. No.
	ECO Connecting Modules – 25 A (IEC), 22 A (UL) - Eco-starters mount on single DIN Rail - Electrical and mechanical interconnection of 140UT MPCB and 100-C	140UT-D7D3 to 100-C09...C23	140UT-D-PEC23

Other Accessories

	Description		For Use With	Cat. No.
	Feeder Terminal for Compact Busbar — 64 A Max Continuous Current		140UT-D-W	140UT-D-WTE
	Three-phase Compact Busbar for MPCBs — 64 A Max Continuous Current • 45 mm (1.77 in.) spacing	2 connections	140UT-D7D3	140UT-D-W452
		3 connections		140UT-D-W453
		4 connections		140UT-D-W454
		5 connections		140UT-D-W455
	DIN (#3) symmetrical hat rail • 35 mm x 7.5 mm x 1 m (1.4 x 0.3 x 39 in.) long • 10 pieces/package		140UT-D	199-DR1
	DIN (#3) Symmetrical Rail • 35 mm x 15 mm x 1 m (1.4 x 0.6 x 39 in.) long • Top Hat Rail (DIN #3 Symmetrical Rail) • 5 pieces/package		140UT-D	1492-DR9

Specifications

Table 3 - General Data

Attribute			140UT
No. of Poles			2 and 3
Rated Insulation Voltage U_i		IEC	690
		UL/CSA	690
Minimum Enclosure Size	0.5...12 A Devices	Suitable for continuous operation at 100% of rating only if used in min enclosure space:	250 x 175 x 150 mm (10 x 7 x 6 in.)
			300 x 175 x 150 mm (11.8 x 7 x 6 in.)
	15...40 A Devices	Suitable for continuous operation at 80% of rating only if used in min enclosure space:	250 x 175 x 150 mm (10 x 7 x 6 in.)
			300 x 175 x 150 mm (11.8 x 7 x 6 in.)
Rated Impulse Withstand Voltage U_{imp}		Pollution degree	3
		Main circuits U_{imp} /Overvoltage Category	6 kV/III
		Auxiliary circuits U_{imp} /Overvoltage Category	6 kV/III
		Safe separation between main and auxiliary circuits	up to 400V
Rated Frequency		[Hz]	50/60
Utilization Category		IEC 60947-2 (Circuit breaker)	A
Life Span	Mechanical	[operations]	100 000
	Electrical (I_e max.)	[operations]	10 000
	Switching Frequency	[operations/hour]	max. 25
Ambient Temperature	Storage	[°C (°F)]	-40...+80
	Operation	[°C (°F)]	-25...+60 (70 with 15% I_n current reduction) (-13...+140 °F [+158 with 15% I_n current reduction])
Climatic resistance	Moisture change climate (600068-2-30)		23 °C (73 °F)/83% relative humidity and 40 °C (104 °F)/92% relative humidity, 56 cycles
	Dry heat (60086-2-2)		100 °C (212 °F), relative humidity < 50%, 7 days
	Moisture heat (60068-2-3)		40 °C (104 °F), relative humidity 93%, 56 days
Site Altitude		[m]	up to 2000 N.N. (6561 ft)
Protection Class			IP2X when wired
Resistance to Shock, Transport (60068-2-27)			30G, 11 ms, all axes
Resistance to Vibration, Operation (60068-2-6)			18 G
Overload Protection Characteristics			Yes per IEC/EN 60947-2, UL489, CSA 22.2

Table 3 - General Data (Continued)

Attribute			14OUT
Ambient Temperature Compensation		[°C (°F)]	-25...+60 (-13...+140)
Phase-loss Protection			No
Short-circuit protection (Magnetic)			fixed setting 15...20 x I_n , (35 A - 14 x I_n and 40 A - 12 x I_n)
Backfeeding			Suitable for backfeeding up to 480Y/277V and 600Y/347V
Total Power loss P_v	at I_n max	[W]	7.5
Main Disconnect Switch Application			Yes, with accessories
HID (High Intensity Discharge) Listed			0.5...40 A
Switching Duty			15 A, 20 A
Heating, air conditioning and refrigeration (HACR)			0.5...40 A
Application Conditions	For utilization outside North America, assemblies (of products) shall comply to the IEC 61439-1 requirements 14OUT MCCBs are intended for use in closed areas without hazardous operating conditions such as dust or explosive or corrosive gases. Enclosures of appropriate manner need to be in place to protect devices in such environments.		
Standards Compliance			UL489; CSA C22.2 No. 5; IEC / EN 60947-1, -2
Certifications			CE; cULus Listed Circuit Breaker

Table 4 - MCCB Connecting Characteristics

Connection			No. of Conductors	14OUT ≤ 15 A	14OUT > 15 A	
Type of terminals						
				Screw Clamp up to 16 A, M4	Screw Clamp > 16 A, M4	
Connection Screw				Pozidriv No. 2/Blade No. 3	Pozidriv No. 2/Blade No. 3	
Wiring	Solid or stranded		1	1...6 mm ²	1.5...10 mm ²	
			2	1...2.5 mm ² 2.5...6 mm ²	1.5...4 mm ² 4...10 mm ²	
	Flexible with ferrule (end sleeve)		1	1...6 mm ²	1.5...10 mm ²	
			2	1...2.5 mm ² 2.5...4 mm ²	1.5...4 mm ² 4...10 mm ²	
	Finely stranded		1	1.5...6 mm ²	2.5...10 mm ²	
			2	1.5...4 mm ² 2.5...6 mm ²	2.5...6 mm ² 4...10 mm ²	
	Cross section per UL/CSA solid, stranded		1	No. 14...10 AWG	No. 14...8 AWG	
			2	No. 14...10 AWG	No. 14...10 AWG No. 12...8 AWG	
	Stripping length (De-isolation length)				10 mm (0.39 in.)	10 mm (0.39 in.)
	Tightening torques			[N•m]	2...2.5	2...2.5
[lb•in]				18...22	18...22	

Table 5 - Cat. No. 14OUT-D-WTE Feeder Terminal Connecting Characteristics; $I_{th} = 65$ A, 60 °C (140 °F)

Connection			No. of Conductors	14OUT-WTE
Conductor Type				D Frame
Type of terminals				Box lugs
Connection Screw				Pozidriv No. 2/Blade No. 4
Wiring	Solid or stranded		1	2.5...25 mm ² , 14...4 AWG
	Flexible with ferrule (end sleeve)		1	2.5...25 mm ² , 14...4 AWG
	Stripping length (De-isolation length)			14 mm (0.55 in.)
Tightening torques			[N•m] [lb•in]	3...3.5 27...31

Accessory Specifications

Table 6 - Auxiliary Contact Specifications

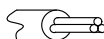
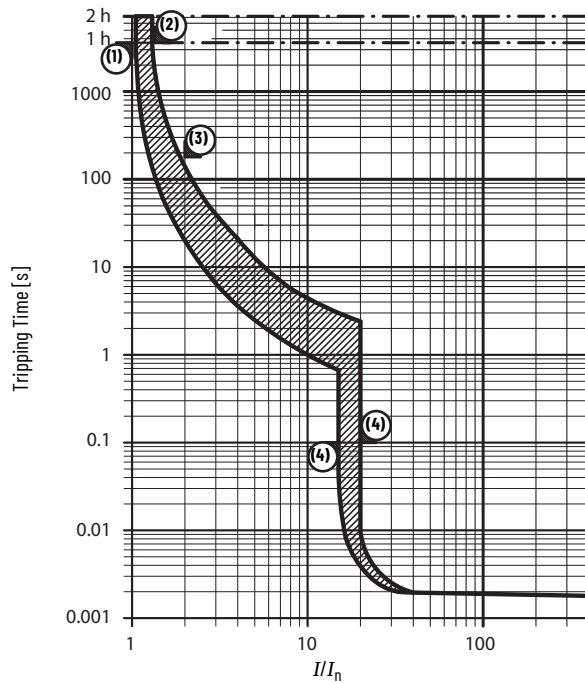
Attribute			Front-mounted Auxiliary Contacts Cat. Nos. 140MT-C-AFA, -AFAR/ -AFAR10M10	
Rated Thermal Current I_{th}	at 40 °C (104 °F) ambient temperature		[A]	5
	at 60 °C (140 °F) ambient temperature		[A]	4
Back-up Fuses gG, gL			[A]	10
General Use current			[A]	5
Rated insulation voltage U_i	IEC		[V]	250
	UL/CSA		[V]	240
Contact rating code designation (UL/CSA)			AC	B300
			DC	R300
Rated Supply Current I_e	AC-15	24V	[A]	4
		120V	[A]	3
		240V	[A]	1.5
		415V	[A]	
		690V	[A]	
	DC-13	24V	[A]	1.2
		125V	[A]	0.22
		250V	[A]	0.11
		400V	[A]	—
		500V	[A]	—
Type of Terminals				
Recommended screwdriver			Pozidriv No. 2 / Blade No.3	
Flexible with insulated ferrule		1 or 2 conductors	0.5...1.5 mm ² / No. 18...14 AWG	
Flexible		1 or 2 conductors	0.5...1.5 mm ² / No. 18...14 AWG	
Stranded per UL/CSA		1 or 2 conductors	0.5...1.5 mm ² / No. 18...14 AWG	
Solid		1 or 2 conductors	0.5...1.5 mm ² / No. 18...14 AWG	
Conductor steps			Max 2 conductor steps allowed	
Tightening torque			1...1.2 N•m/8.9...10.6 lb•in	

Table 7 - Undervoltage and Shunt Trip Specifications

Attribute				Undervoltage Trip for Left-side Mounting Cat. No. 140MT-C-UX	Shunt Trip for Left-side Mounting Cat. No. 140MT-C-SN
Actuating Voltage	Pick-up		[V]	$0.85...1.1 \times U_s$	$0.7...1.1 \times U_s$
	Drop-out		[V]	$0.7...0.35 \times U_s$	$0.7...1.1 \times U_s$
Rated AC Control Voltage	140MT-C-UXK	50 Hz	[V AC]	24	—
		60 Hz	[V AC]	28	—
	140MT-C-UXD	50 Hz	[V AC]	110	—
		60 Hz	[V AC]	120	—
	140MT-C-UXF	50 Hz	[V AC]	220...230	—
		60 Hz	[V AC]	—	—
	140MT-C-UXA	50 Hz	[V AC]	—	—
		60 Hz	[V AC]	240...260	—
	140MT-C-UXN	50 Hz	[V AC]	380...400	—
		60 Hz	[V AC]	440...460	—
	140MT-C-UXB	50 Hz	[V AC]	415	—
		60 Hz	[V AC]	480	—
	140MT-C-SNK	50 Hz	[V AC]	—	24
		60 Hz	[V AC]	—	24...28
	140MT-C-SND	50 Hz	[V AC]	—	110
		60 Hz	[V AC]	—	120
	140MT-C-SNF	50 Hz	[V AC]	—	220...230
		60 Hz	[V AC]	—	—
	140MT-C-SNA	50 Hz	[V AC]	—	—
		60 Hz	[V AC]	—	240...260
	140MT-C-SNT	50 Hz	[V AC]	—	240
		60 Hz	[V AC]	—	277
	140MT-C-SNN	50 Hz	[V AC]	—	380...400
		60 Hz	[V AC]	—	440...460
	140MT-C-SNB	50 Hz	[V AC]	—	415
		60 Hz	[V AC]	—	480
	On-time			Continuous duty	Continuous duty
	Coil consumption	Pick-up	[VA/W]	8.5/8	8.5/8
		Hold-in	[VA/W]	4/2	4/2
Rated DC Control Voltage	140MT-C-SNZJ		[V DC]	—	24
	On-time				Max 5 s
	Coil consumption	Pick-up	[W]		50
Type of Terminals					
Recommended screwdriver				Pozidriv No. 2 / Blade No.3	Pozidriv No. 2 / Blade No.3
Flexible with insulated ferrule		1 or 2 conductors		0.5...2.5 mm ² / No. 18...14 AWG	0.5...2.5 mm ² / No. 18...14 AWG
Flexible		1 or 2 conductors		0.75...2.5 mm ² / No. 18...14 AWG	0.75...2.5 mm ² / No. 18...14 AWG
Stranded per UL/CSA		1 or 2 conductors		0.75...2.5 mm ² / No. 18...14 AWG	0.75...2.5 mm ² / No. 18...14 AWG
Solid		1 or 2 conductors		0.5...2.5 mm ² / No. 18...14 AWG	0.5...2.5 mm ² / No. 18...14 AWG
Conductor steps				Max 2 conductor steps allowed	Max 2 conductor steps allowed
Tightening torque				1...1.2 N•m/8.9...10.6 lb•in	1...1.2 N•m/8.9...10.6 lb•in1...1.2

Time-Current Characteristic

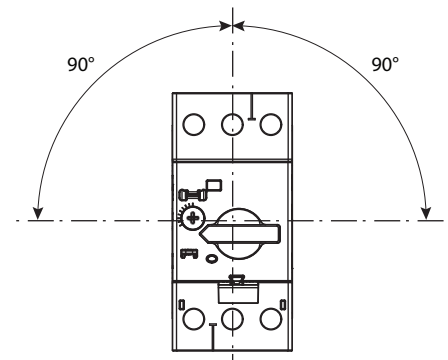
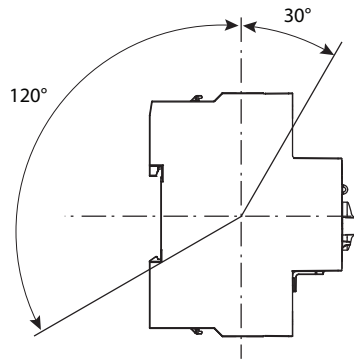
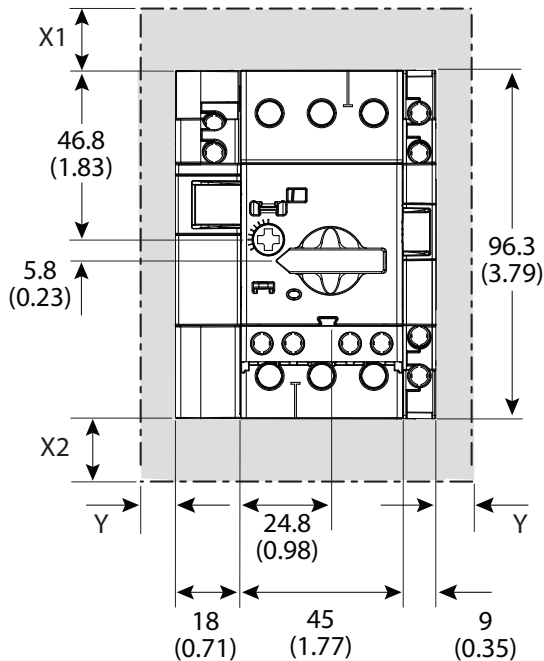
Figure 1 - Molded Case Circuit Breaker Time-Current Characteristic



Note	Information
1	Conventional non-tripping current $I_{nt} = 1.0 \times I_n$
2	Conventional tripping current $I_t = 1.35 \times I_n$; $t < 1$ h
3	$2.0 \times I_n$; $t = 180$ s max
4	Trip curve $15...20 \times I_n$

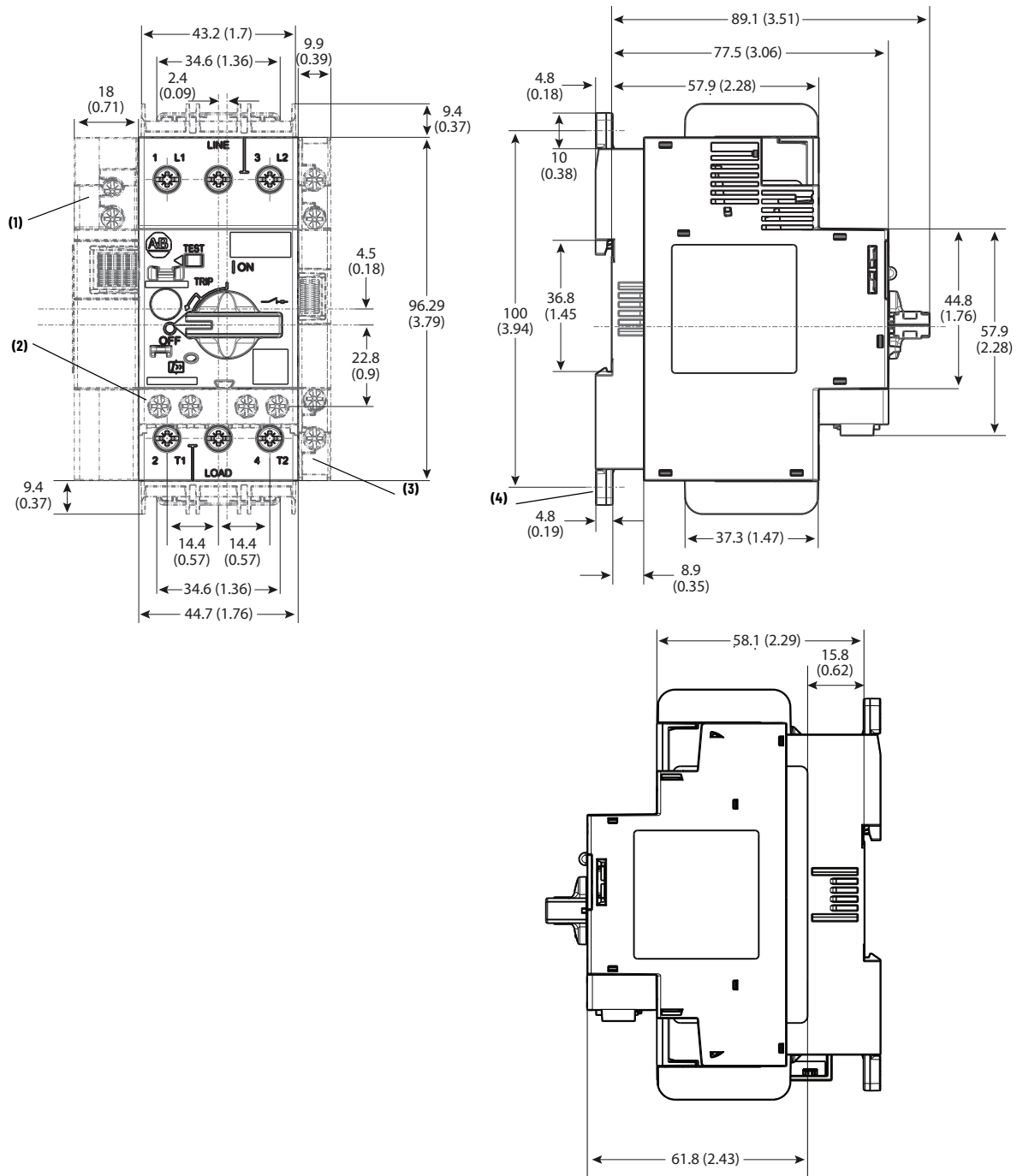
Approximate Dimensions

Figure 2 - Mounting Position and Spacing Requirements



Voltage [V AC]	Minimum Distance to Grounded Parts or Walls [mm (in.)]		
	X1	X2	Y
400	30 (1-3/16)	30 (1-3/16)	9 (23/64)
500	30 (1-3/16)	30 (1-3/16)	9 (23/64)
690	50 (1-31/32)	50 (1-31/32)	30 (1-3/16)

Figure 3 - Molded Case Circuit Breaker, Cat. No. 14OUT-D7...



Note	Information
1	Undervoltage/shunt trip
2	Auxiliary contact (front mounted)
3	Auxiliary contact (side mounted) Do not use for UL 489 applications
4	Screw mounting adapter

Additional Resources

These documents contain additional information concerning related products from Rockwell Automation. You can view or download publications at rok.auto/literature.

Resource	Description
Motor Protection Circuit Breaker and Motor Circuit Protector Specifications, publication 140-TD005	Provides product selection and specification information for Bulletin 140MP/MT motor protection circuit breakers and motor circuit protectors.
Molded Case Circuit Breaker Selectivity Guide, publication 140G-TD050	Aids in selecting circuit breaker pairs for line and load side protection.
Short-circuit Current Ratings and Your Industrial Control Panel, publication SCCR-AT002	Provides examples for short-circuit current ratings of panels based on the methods stated in UL 508A Supplement B.
UL Standards Listing for Industrial Control Products, publication CMPNTS-SR002	Assists original equipment manufacturers (OEMs) with construction of panels, to help ensure that they conform to the requirements of Underwriters Laboratories.
American Standards, Configurations, and Ratings: Introduction to Motor Circuit Design, publication IC-AT001	Provides an overview of American motor circuit design based on methods that are outlined in the NEC.
Industrial Components Preventive Maintenance, Enclosures, and Contact Ratings Specifications, publication IC-TD002	Provides a quick reference tool for Allen-Bradley industrial automation controls and assemblies.
Safety Guidelines for the Application, Installation, and Maintenance of Solid-state Control, publication SGI-1.1	Designed to harmonize with NEMA Standards Publication No. ICS 1.1-1987 and provides general guidelines for the application, installation, and maintenance of solid-state control in the form of individual devices or packaged assemblies incorporating solid-state components.
Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1	Provides general guidelines for installing a Rockwell Automation industrial system.
Product Selection and Configuration tools, rok.auto/systemtools	Helps configure complete, valid catalog numbers and build complete quotes based on detailed product information.
Rockwell Automation Global SCCR tool, rok.auto/sccr	Provides coordinated high-fault branch circuit solutions for motor starters, soft starters, and component drives.
Product Certifications website, rok.auto/certifications	Provides declarations of conformity, certificates, and other certification details.

Rockwell Automation Support

Use these resources to access support information.

Technical Support Center	Find help with how-to videos, FAQs, chat, user forums, Knowledgebase, and product notification updates.	rok.auto/support
Local Technical Support Phone Numbers	Locate the telephone number for your country.	rok.auto/phonesupport
Technical Documentation Center	Quickly access and download technical specifications, installation instructions, and user manuals.	rok.auto/techdocs
Literature Library	Find installation instructions, manuals, brochures, and technical data publications.	rok.auto/literature
Product Compatibility and Download Center (PCDC)	Download firmware, associated files (such as AOP, EDS, and DTM), and access product release notes.	rok.auto/pcdc

Documentation Feedback

Your comments help us serve your documentation needs better. If you have any suggestions on how to improve our content, complete the form at rok.auto/docfeedback.

Allen-Bradley, expanding human possibility, and Rockwell Automation are trademarks of Rockwell Automation, Inc.

EtherNet/IP is a trademark of ODVA, Inc.

Trademarks not belonging to Rockwell Automation are property of their respective companies.

Rockwell Automation maintains current product environmental compliance information on its website at rok.auto/pec.

Rockwell Otomasyon Ticaret A.Ş. Kar Plaza İş Merkezi E Blok Kat:6 34752, İçerenköy, İstanbul, Tel: +90 (216) 5698400 EEE Yönetmeliğine Uygundur

Connect with us.    

rockwellautomation.com — expanding **human possibility**[®]

AMERICAS: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000

EUROPE/MIDDLE EAST/AFRICA: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2663 0600

ASIA PACIFIC: Rockwell Automation SEA Pte Ltd, 2 Corporation Road, #04-05, Main Lobby, Corporation Place, Singapore 618494, Tel: (65) 6510 6608

UNITED KINGDOM: Rockwell Automation Ltd., Pitfield, Kiln Farm, Milton Keynes, MK11 3DR, United Kingdom, Tel: (44)(1908) 838-800

Publication 14OUT-TD001C-EN-P - February 2024

Supersedes Publication 14OUT-TD001B-EN-P - July 2023

Copyright © 2024 Rockwell Automation, Inc. All rights reserved. Printed in the U.S.A.