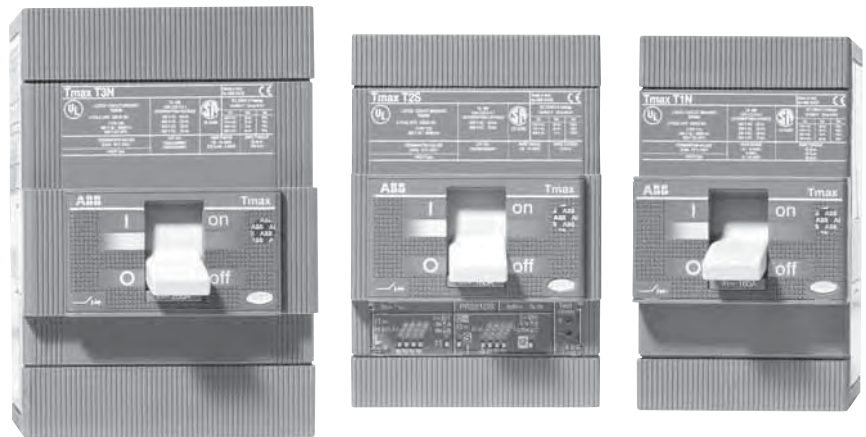


Tmax Molded case circuit breakers



Tmax Molded case circuit breakers



Introduction

ABB is once again demonstrating its commitment to new product development and its superiority in product performance. Never before has the industry seen such high performance, versatility and standardization in a range of molded case circuit breakers.

The ABB Tmax has been developed to complement the performance-proven Isomax line of circuit breakers. This new breaker, with a range up to 600A, has several very big features that go along with its very small size:

- Double insulation – this construction characteristic allows for the UL Listed field installation of internal accessories without exposure to the power poles.
- Positive operation – all molded case breakers from ABB ensure that the toggle indicates the precise position of the moving contacts. This guarantees safe and reliable signaling by the device.
- Installation – Tmax Series can be installed in panels and switchboards in either the horizontal or vertical planes while being fed from either end without any derating of their performance characteristics.
- Two ranges of accessories – in the pursuit of standardization, all Tmax internal and external accessories can be utilized across the entire range from 15A to 600A.
- Interrupt ratings at 480VAC up to 150kAIC.
- Compact size
- UL Listed and IEC rated for global application and acceptance.

The ABB Tmax has the performance and accessories to satisfy all industry requirements in the 600VAC to 600VDC ranges. A single pole molded case version is available for the first time.

Frame sizes — five basic sizes

The ABB Tmax series includes five basic frame sizes as well as the T1 single pole with the range rated from 15A to 600A at 480VAC. The various versions carry the following interrupting capacities:

- **B** Basic breaking capacity
- **N** Normal breaking capacity
- **S** Standard breaking capacity
- **H** High breaking capacity
- **L** Limiting capacity
- **V** Very high breaking capacity

Derived versions

- T2, T4 & T5 circuit breakers with LS/I electronic trip units
- Switch disconnectors in T1, T3, T4 and T5 frames
- Circuit breakers for motor circuit protection (MCPs)
- Circuit breakers for direct current

ABB Tmax versions

- Fixed: all models
- Plug-in: T2, T3, T4 and T5 UL
- UL File #E93565 (breakers and MCPs)
#E116596 (Accessories)
#E116595 (Molded case switches)



General information

Circuit breakers for power distribution

T1 – T3



T1



T2



T3

UL 489 CSA C22.2

			Tmax T1 1P	Tmax T1	Tmax T2	Tmax T3
Frame size	A		100	100	100	225
Number of poles	Nr		1	3, 4	3, 4	3, 4
Rated voltage	V	AC (50-60 Hz)	277	600Y / 347V	480	600Y/347V
	V	DC		500		500
Interrupting ratings			B	N	S H	N S
	kA	AC 240 V	18 ①	50 ②	65 100	50 65
	kA	277 V		22 ②		25 35
	kA	480 V		10	35 65	10 10
	kA	600Y/347				
	kA	600 V				
	kA	DC 250 V - 2 poles in series		25		25 35
	kA	500 V - 3 poles in series		25		25 35
	kA	500 V - 2 poles in series				
	kA	600 V - 3 poles in series				
Trip units		TMF	■	■	■	■
		TMD/TMA				
		ELT			■	
		MA			■	■
Versions		MCCB	■	■	■	■
		MCS		■		■
		MCP			■	■

IEC 60947-2

Rated uninterrupted current, Iu	A		160	160	160	250
Number of poles	Nr		1	3, 4	3, 4	3, 4
Rated service voltage, Ue	V	AC (50-60 Hz)	240	690	690	690
	V	DC	125	500	500	500
Rated ultimate short circuit breaking capacity, Icu			B	B C N	N S H L	N S
	kA	AC (50-60 Hz)	25	25 40 50	65 85 100 120	50 85
	kA	220/230 V		16 25 36	36 50 70 85	36 50
	kA	380/415 V		10 15 22	30 45 55 75	25 40
	kA	440 V		8 10 15	25 30 36 50	20 30
	kA	500 V		3 4 6	6 7 8 10	5 8
	kA	690 V		16 25 36	36 50 70 85	36 50
	kA	DC		20 30 40	40 55 85 100	40 55
	kA	250 V - 2 poles in series		16 25 36	36 50 70 85	36 50
	kA	250 V - 3 poles in series				
	kA	500 V - 2 poles in series				
	kA	500 V - 3 poles in series				
	kA	750 V - 3 poles in series				
Trip units		TMF	■	■	■	■
		TMD/TMA				
		ELT			■	
		MF			■	
		MA			■	■

UL 489 CSA C22.2 and IEC 60947-2

Dimensions						
H	in/mm		5.12/130	5.12/130	5.12/130	5.9/150
W 1p or 3p	in/mm		1/25.4	3/76	3.54/90	4.13/105
W 4p	in/mm			4/102	4.72/120	5.51/140
D	in/mm		2.76/70	2.76/70	2.76/70	2.76/70
Mechanical life	No. operations		25,000	25,000	25,000	25,000
	No. Hourly operations		240	240	240	240
	No. operations		8000	8000	8000	8000
	No. hourly operations		120	120	120	120
Weights (Fixed 3P)	Lbs.		1.06	2.34	2.86	5.45

① In15A = 10kA @ 277 VAC

② In15A = 35kA @ 240 VAC, 14 kA @ 480 VAC

TMF = Thermomagnetic trip unit with fixed thermal and magnetic threshold

TMD = Thermomagnetic trip unit with adjustable thermal threshold and fixed magnetic threshold.

General information

Circuit breakers for power distribution

T4 – T5

Tmax
MCCBs



T4



T5

UL 489 CSA C22.2

		Tmax T4					Tmax T5					
Frame size		A	250					600				
Number of poles		Nr	3, 4					3, 4				
Rated voltage	AC (50-60 Hz)	V	600					600				
	DC	V	600					600				
Interrupting ratings			N	S	H	L	V	N	S	H	L	V
	AC 240 V	kA	65	100	150	200	200	65	100	150	200	200
	277 V	kA										
	480 V	kA	25	35	65	100	150	25	35	65	100	150
	600 V	kA	18	25	35	65	100	18	25	35	65	100
	DC 250 V - 2 poles in series	kA										
	500 V - 3 poles in series	kA										
	500 V - 2 poles in series	kA	25	35	50	65	100	25	35	50	65	100
	600 V - 3 poles in series	kA	16	25	35	50	65	16	25	35	50	65
	Trip units	TMF		■								
TMD/TMA			■					■				
ELT			■					■				
MA												
Versions	MCCB		■					■				
	MCS		■					■				
	MCP		■					■				

IEC 60947-2

Rated uninterrupted current, Iu		A	250 - 320					400 - 630				
Number of poles		Nr	3, 4					3, 4				
Rated service voltage, Ue	AC (50-60 Hz)	V	690					690				
	DC	V	750					750				
Rated ultimate short circuit breaking capacity, Icu			N	S	H	L	V	N	S	H	L	V
	AC (50-60 Hz)	kA	70	85	100	200	300	70	85	100	200	300
	220/230 V	kA	36	50	70	120	200	36	50	70	120	200
	380/415 V	kA	30	40	65	100	180	30	40	65	100	180
	440 V	kA	25	30	50	85	150	25	30	50	85	150
	500 V	kA	20	25	40	70	80	20	25	40	70	80
	690 V	kA	36	50	70	120	200	36	50	70	120	200
	DC	kA										
	250 V - 2 poles in series	kA	25	36	50	70	100	25	36	50	70	100
	500 V - 3 poles in series	kA	16	25	36	50	70	16	25	36	50	70
Trip units	TMF											
	TMD/TMA		■					■				
	ELT		■					■				
	MF											
	MA		■									

UL 489 CSA C22.2 and IEC 60947-2

Dimensions	H	in/mm	8.07/205		8.07/205	
	W 1p or 3p	in/mm	4.13/105		5.51/140	
	W 4p	in/mm	5.51/140		7.24/184	
	D	in/mm	4.07/103.5		4.07/103.5	
Mechanical life	No. operations		20,000		20,000	
	No. Hourly operations		240		120	
	No. operations		8000 (250A)-6000 (320A)		7000 (400A)-5000 (630A)	
	No. hourly operations		120		60	
Weights (Fixed 3P)	Lbs.		6.18		8.55	

TMA = thermomagnetic trip unit with adjustable thermal and magnetic threshold
 MF = Magnetic fixed trip unit
 MA = Magnetic adjustable trip unit
 ELT = Electronic trip unit



General information

Circuit breakers for specific applications in accordance with IEC 60947-2



T1



T2



T3

Circuit breakers for distribution AC-DC

			Tmax T1 1P	Tmax T1	Tmax T2	Tmax T3
Rated uninterrupted circuit	A		160	160	160	225
Number of poles	Nr		1	3, 4	3, 4	3, 4
Rated voltage	V	AC 50-60 Hz	240	690	690	690
	kA rms		B	B C N	N S H L	N S
	kA rms	380/415 VAC	25 ①	16 25 36	36 50 70 85	36 50
	kA rms	440 VAC		10 15 22	30 45 55 75	25 40
	kA rms	690 VAC		3 4 6	6 7 8 10	5 8
Ics/Icu @ 380/415 VAC %				100 100 50	100 100 100 75	75 50
Dimensions fixed version (3p)	H	in-mm	5.12 - 130	5.12 - 130	5.12 - 130	5.0 - 150
	W	in-mm	1 - 25.4	3 - 76	3.54 - 90	4.13 - 105
	D	in-mm	2.76 - 70	2.76 - 70	2.76 - 70	2.76 - 70

Circuit breakers for motor protection

Iu	A				160	250
Poles					3	3
In	A				1 - 100	100 - 200
Ue	V				690	690
Trip unit	Adjustable magnetic only	(6 - 12xin)			■	■
	Electronic	PR221DS-I			■	
		PR222/MP (IEC 60947-4-1)				
		PR212/P-I				
		PR212/MP (IEC 60947-4-1)				

Switch-disconnectors

Poles	Nr			3, 4		3, 4
Ith	A			160		250
Ue	V			690		690
Uimp	kV			8		8
Ui	V			800		800
Icm	kA			2.8		5.3
Icw (1s)	kA			2		3.6

① For In 16A and In 20A: Icu @ 220/230 VAC = 16 kA

General information

Circuit breakers for specific applications in accordance with IEC 60947-2

Tmax
MCCBs



T4



T5

				Tmax T4	Tmax T5	
Circuit breakers for distribution AC-DC						
Rated uninterrupted current		A		250	400 - 630	
Number of poles		Nr		3, 4	3, 4	
Rated voltage	AC (50-60 Hz)	V		690	690	
Icu		kA rms	N S H L V			
	380/415 VAC	kA rms	36 50 70 120 200		36 50 70 120 200	
	440 VAC	kA	30 40 65 100 180		30 40 65 100 180	
	480 V	kA	20 25 40 70 80		20 25 40 70 80	
	690 VAC	kA	20 25 40 70 80		20 25 40 70 80	
Ics/Icu @ 380/415 VAC			100 100 100 100 100		100 100 100 100 100	
Dimensions fixed version (3p)						
	H	in-mm		8.07/205	8.07 - 205	
	W	in-mm		4.13/105	5.51/140	
	D	in-mm		4.07/103.5	4.07/103.5	
Circuit breakers for motor protection						
Iu		A		250	400	
Poles				3	3	
In				80 - 250	320 - 400	
Ue		V		690	690	
Trip unit	Adjustable magnetic only (6 - 12xin)			■		
	Electronic PR221DS-I			■	■	
	PR222/MP (IEC 60947-4-1)			■	■	
	PR212P-I					
	PR212/MP (IEC 60947-4-1)					
Switch-disconnectors						
Poles		Nr		3/4	3/4	
Ith				250 - 320	400 - 630	
Ue		V		690	690	
Uimp		kV		8	8	
Ui		V		800	800	
Icm		kA		5.3	5.3	
Icw (1s)		kA		3.6	6	

① For In 16A and In 20A: Icu @ 220/230 VAC = 16 kA



General information

Catalog number explanation

T3 S 080 T W - 4 xxx

Accessories (added in alpha-numeric order) ^①

A = Auxiliary Switch
S_ = Shunt trip with voltage code
U_ = Undervoltage release with voltage code

Number of poles

-1 = 1 pole (T1 only)
-4 = 4 pole
None = 3 pole

Type connectors

W = None
L = Lugs included

Trip unit function

B = LS/I (AC only)
D = Molded Case Switch (MCS)
T = Thermal-magnetic – 10X Mag
M = Magnetic only (MCP)
E5 = Electronic MCP (AC only)
C = LSI (AC only)
E = LSIG (AC only)

Current rating

015 = 15A
080 = 80A
100 = 100A
225 = 225A
250 = 250A
400 = 400A

Interrupting rating class

B = Basic
N = Normal
S = Standard
H = High
L = Limiting
V = Very high

Frame size

T1 = 100A
T2 = 100A
T3 = 225A
T4 = 250A
T5 = 600A



T1

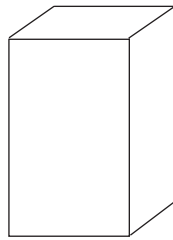
100A, 600Y/347

Standard thermal-magnetic

Tmax
MCCBs



T1



H x W x D
5.12" x 3.00" x 2.76"

General

The T1 breaker family ranges from 15 through 100 amperes. The T1 trip units are non-interchangeable and use the very latest technology in electromagnetic relays for overcurrent trip protection. Thermal overload protection is provided by heat sensitive bimetals. Short circuit protection for the breaker is accomplished using a precise magnetic coil. State of the art construction in contacts and arcing chambers aid in limiting damaging fault currents through the protected circuits.

Versions

The T1 frame is available in two versions:

- T = Thermal-magnetic, fixed
- D = Molded case switch

Performance levels

The T1 breaker has two performance levels available:

- B = 277V Single pole
- N = 600Y / 347V Three pole

Number of poles

The UL/CSA version of the T1 is available in single, three and four pole versions. IEC versions of the T1 are also available with the same dimensions up to 160 amperes.

Accessory mounting

The T1 frame is double insulated allowing for UL/CSA factory or field installation of internal accessories. No extra control cables are required for field installation. Shunt trips or UVR's mount in the left cavity and auxiliary contacts with bell alarm mount in the right cavity.

Reverse feeding

All versions of the T1 family are suitable for reverse feed applications.

Molded case switches

UL489 switches include no overcurrent protection except for a high instantaneous trip mechanism for self protection.

UL489 / CSA C22.2 Interrupting capacity (kA RMS)

Voltage	Continuous rating	B (1 pole)	N
240VAC	15 – 100A	—	50 ①
277VAC	15A	10	—
	20 – 100A	18	—
480VAC	15A	—	14
	20 – 100A	—	22
600Y/347VAC	15 – 100A	—	10
250VDC 2 pole series	15 – 100A	—	25
500VDC 3 pole series	15 – 100A	—	25

IEC-947 Interrupting capacity (kA RMS)

Voltage	Continuous rating	B (1 pole)	N
230V	15 – 100A	25	50
415V	15 – 100A	—	36
440V	15 – 100A	—	22
500V	15 – 100A	—	15
690V	15 – 100A	—	6
250VDC 2 pole series	15 – 100A	—	36
500VDC 3 pole series	15 – 100A	—	36

① In 15A 35kA @ 240VAC.



T1

100A, 600Y/347

Standard thermal-magnetic

T1N TMF

Breaker	IC at 480VAC	Rating	Magnetic trip	3 pole, 600Y/347VAC/500VDC catalog number	List price
T1N	14kA	15A	1000A	T1N015TL ^①	\$ 402
	22kA	20A	1000A	T1N020TL	402
		25A	1000A	T1N025TL	402
		30A	1000A	T1N030TL	402
		40A	1000A	T1N040TL	402
		50A	1500A	T1N050TL	402
		60A	1500A	T1N060TL	402
		70A	1500A	T1N070TL	479
		80A	1500A	T1N080TL	479
		90A	1500A	T1N090TL	479
		100A	1500A	T1N100TL	479

T1B TMF — Single pole

Breaker	IC at 277VAC	Rating	Magnetic trip	1 pole, 277VAC catalog number	List price
T1B	10kA	15A	1000A	T1B015TL-1	\$ 230
	18kA	20A	1000A	T1B020TL-1	230
		25A	1000A	T1B025TL-1	230
		30A	1000A	T1B030TL-1	230
		40A	1000A	T1B040TL-1	230
		50A	1500A	T1B050TL-1	230
		60A	1500A	T1B060TL-1	230
		70A	1500A	T1B070TL-1	262
		80A	1500A	T1B080TL-1	262
		90A	1500A	T1B090TL-1	262
		100A	1500A	T1B100TL-1	262

T1N-D — Molded case switch

Breaker	Interrupting capacity ^②	Rating	Magnetic trip	480VAC/500VDC catalog number	List price
T1-D	240V, 50kA	100A	1000A	T1N100DL	\$ 431

T1N TMF — 100% Rated standard thermal-magnetic

Breaker	IC at 480VAC	Rating	Magnetic trip	3 pole 600Y/347 500VDC catalog number	List price
T1N	14kA	15 ^①	1000A	T1NQ015TL	\$ 442
	22kA	20	1000A	T1NQ020TL	
		25	1000A	T1NQ025TL	
		30	1000A	T1NQ030TL	
		40	1000A	T1NQ040TL	
		50	1500A	T1NQ050TL	
		60	1500A	T1NQ060TL	
		70	1500A	T1NQ070TL	527
		80	1500A	T1NQ080TL	
		90	1500A	T1NQ090TL	
		100	1500A	T1NQ100TL	

^① Rated 277/480Y for 15A.

^② With fuse or MCCB protected circuit.

T2

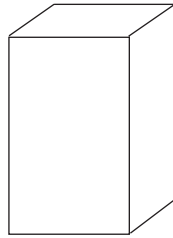
100A, 480V

Thermal-magnetic/electronic

Tmax
MCCBs



T2



H x W x D
5.12" x 3.54" x 2.76"

General

The T2 breaker family ranges from 10 through 100 amperes. The T2 trip units are non-interchangeable and use the very latest technology in electromagnetic relays for overcurrent trip protection as well as a version with microprocessor-based electronic trip unit. Thermal overload protection is provided by heat sensitive bimetals. State of the art construction in contacts and arcing chambers aid in limiting damaging fault currents through the protected circuits.

Versions

The T2 frame is available in four versions:

- T = Thermal-magnetic, fixed
- B = Adjustable LS/I electronic
- M = Magnetic only (MCP)
- E5 = Electronic instantaneous only (MCP)

Trip functions

These tripping functions are available:

- L = Long time
- S = Short time
- I - Instantaneous

Performance levels

The T2 breaker has two performance levels available:

- S = Standard
- H = High

Number of poles

The UL/CSA version of the T2 is available in three and four pole versions. IEC versions of the T2 are also available with the same dimensions up to 160 amperes.

Accessory mounting

The T2 frame is double insulated allowing for UL/CSA factory or field installation of internal accessories. No extra control cables are required for field installation. Shunt trips or UVR's mount in the left cavity and auxiliary contacts with bell alarm mount in the right cavity.

Reverse feeding

All versions of the T2 family are suitable for reverse feed applications.

UL489 / CSA C22.2 Interrupting capacity (kA RMS)

Voltage	Continuous rating	S	H
240VAC	15 – 100A	65	100
480VAC	15 – 100A	35	65

IEC-947 Interrupting capacity (kA RMS)

Voltage	Continuous rating	S	H
230V	15 – 100A	85	100
415V	15 – 100A	50	70
440V	15 – 100A	45	55
500V	15 – 100A	30	36
690V	15 – 100A	7	8
250VDC 2 pole series	15 – 100A	50	70
500VDC 3 pole series	15 – 100A	50	70



T2

100A, 480V

Thermal-magnetic/electronic

T2 — 100A TMF

Breaker	IC at 480VAC	Rating	Magnetic trip	3 pole, 480VAC catalog number	List price
T2S	35kA	15A	500A	T2S015TW	\$ 690
		20A	500A	T2S020TW	690
		25A	500A	T2S025TW	690
		30A	500A	T2S030TW	690
		40A	500A	T2S040TW	690
		50A	500A	T2S050TW	690
		60A	600A	T2S060TW	690
		70A	700A	T2S070TW	793
		80A	800A	T2S080TW	793
		90A	900A	T2S090TW	793
		100A	1000A	T2S100TW	793

Breaker	IC at 480VAC	Rating	Magnetic trip	3 pole, 480VAC catalog number	List price
T2H	65kA	15A	500A	T2H015TW	\$ 942
		20A	500A	T2H020TW	942
		25A	500A	T2H025TW	942
		30A	500A	T2H030TW	942
		40A	500A	T2H040TW	942
		50A	500A	T2H050TW	942
		60A	600A	T2H060TW	942
		70A	700A	T2H070TW	1153
		80A	800A	T2H080TW	1153
		90A	900A	T2H090TW	1153
		100A	1000A	T2H100TW	1153

T2 — 100A frame electronic trip unit (AC only)

Breaker	IC at 480VAC	Trip unit type	CT rating	3 pole, 480VAC catalog number	List price
T2S	35kA	PR221DS-LS/I	25A	T2S025BW	\$ 1240
			60A	T2S060BW	1240
			100A	T2S100BW	1343
T2H	65kA	PR221DS-LS/I	25A	T2H025BW	1492
			60A	T2H060BW	1492
			100A	T2H100BW	1703

T2 — 100A frame magnetic only (MCP)

15

Breaker	IC at 480VAC	Trip unit type	Rating	Adjustment range	3 pole, 480VAC catalog number	List price
T2S	35kA	Mag only	20A	120 - 240	T2S020MW	\$ 598
			50A	300 - 600	T2S050MW	670
			100A	600 - 1200	T2S100MW	804
T2H	65kA	Mag only	20A	120 - 240	T2H020MW	673
			50A	300 - 600	T2H050MW	754
			100A	600 - 1200	T2H100MW	904

T2 — 100A frame instantaneous only, electronic (MCP - AC only)

Breaker	IC at 480VAC	Trip unit type	Rating	Adjustment range	3 pole, 480VAC catalog number	List price
T2S	35kA	Instantaneous only	25A	25 - 250	T2S025E5W	\$ 1178
			60A	60 - 600	T2S060E5W	1178
			100A	100 - 1000	T2S100E5W	1276
T2H	65kA	Instantaneous only	25A	25 - 250	T2H025E5W	1417
			60A	60 - 600	T2H060E5W	1417
			100A	100 - 1000	T2H100E5W	1618

T2
100A, 480V, 100% rated
Thermal-magnetic/electronic



T2 – 100A TMF, 100% rated

Breaker	IC at 480VAC	Rating	Magnetic trip	3 pole, 480VAC catalog number	List price
T2S	35kA	15A	500A	T2SQ015TW	\$ 760
		20A	500A	T2SQ020TW	
		25A	500A	T2SQ025TW	
		30A	500A	T2SQ030TW	
		40A	500A	T2SQ040TW	
		50A	500A	T2SQ050TW	
		60A	600A	T2SQ060TW	
		70A	700A	T2SQ070TW	
		80A	800A	T2SQ080TW	
		90A	900A	T2SQ090TW	
		100A	1000A	T2SQ100TW	872

Breaker	IC at 480VAC	Rating	Magnetic trip	3 pole, 480VAC catalog number	List price
T2H	65kA	15A	500A	T2HQ015TW	\$ 1025
		20A	500A	T2HQ020TW	
		25A	500A	T2HQ025TW	
		30A	500A	T2HQ030TW	
		40A	500A	T2HQ040TW	
		50A	500A	T2HQ050TW	
		60A	600A	T2HQ060TW	
		70A	700A	T2HQ070TW	
		80A	800A	T2HQ080TW	
		90A	900A	T2HQ090TW	
		100A	1000A	T2HQ100TW	1268

T2 – 100A frame electronic trip unit (AC only)

Breaker	IC at 480VAC	Trip unit type	CT rating	3 pole, 480VAC catalog number	List price
T2S	35kA	PR221DS-LS/I	25A	T2SQ025BW	\$ 1363
			60A	T2SQ060BW	
			100A	T2SQ100BW	1477
T2H	65kA	PR221DS-LS/I	25A	T2HQ025BW	1640
			60A	T2HQ060BW	
			100A	T2HQ100BW	1873



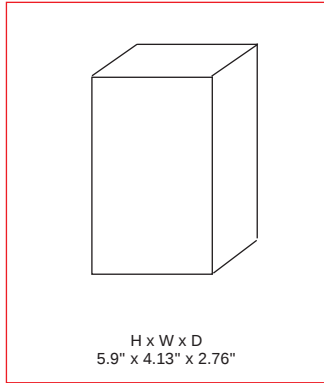
T3

600Y/347V

Thermal-magnetic



T3



H x W x D
5.9" x 4.13" x 2.76"

General

The T3 breaker family ranges from 60 through 225 amperes. The T3 trip units are non-interchangeable and use the very latest technology in electromagnetic relays for overcurrent trip protection. Thermal overload protection is provided by heat sensitive bimetals. Short circuit protection begins at 10 times the thermal rating of the breaker using a precise magnetic coil. State of the art construction in contacts and arcing chambers aid in limiting damaging fault currents through the protected circuits.

Versions

The T3 frame is available in three versions:

- T = Thermal-magnetic, fixed
- M = Magnetic only (MCP)
- D = Molded case switch

Performance levels

The T3 breaker has two performance levels available:

- N = Normal
- S = Standard

Number of poles

The UL/CSA version of the T3 is available in three and four pole versions. IEC versions of the T3 are also available with the same dimensions up to 250 amperes.

Accessory mounting

The T3 frame is double insulated allowing for UL/CSA factory or field installation of internal accessories. No extra control cables are required for field installation. Shunt trips or UVR's mount in the left cavity and auxiliary contacts with bell alarm mount in the right cavity.

Reverse feeding

All versions of the T3 family are suitable for reverse feed applications.

Molded case switches

UL489 switches include no overcurrent protection except for a high instantaneous trip mechanism for self protection.

UL489 / CSA C22.2 Interrupting capacity (kA RMS)

Voltage	Continuous rating	N	S
240VAC	60 – 225A	50	65
480VAC	60 – 225A	25	35
600Y/347VAC	60 – 225A	10	10
250VDC 2 pole series	60 – 225A	25	35
500VDC 3 pole series	60 – 225A	25	35

IEC-947 Interrupting capacity (kA RMS)

Voltage	Continuous rating	N	S
230V	60 – 225A	50	85
415V	60 – 225A	36	50
440V	60 – 225A	25	40
500V	60 – 225A	20	30
690V	60 – 225A	5	8
250VDC 2 pole series	60 – 225A	36	50
500VDC 3 pole series	60 – 225A	36	50

T3

225A, 600Y/347V

Thermal-magnetic trip units



T3 — 225A Frame TMF

Breaker	IC at 480VAC	Rating	Magnetic trip	3 pole, 480VAC/500VDC catalog number	List price
T3N	25kA	60A	600A	T3N060TW	\$ 615
		70A	700A	T3N070TW	740
		80A	800A	T3N080TW	740
		90A	900A	T3N090TW	740
		100A	1000A	T3N100TW	740
		125A	1250A	T3N125TW	1560
		150A	1500A	T3N150TW	1560
		175A	1750A	T3N175TW	1560
		200A	2000A	T3N200TW	1560
		225A	2250A	T3N225TW	1560

Breaker	IC at 480VAC	Rating	Magnetic trip	3 pole, 480VAC/500VDC catalog number	List price
T3S	35kA	60A	600A	T3S060TW	\$ 790
		70A	700A	T3S070TW	970
		80A	800A	T3S080TW	970
		90A	900A	T3S090TW	970
		100A	1000A	T3S100TW	970
		125A	1250A	T3S125TW	2160
		150A	1500A	T3S150TW	2160
		175A	1750A	T3S175TW	2160
		200A	2000A	T3S200TW	2160
		225A	2250A	T3S225TW	2160

T3 — 225A frame magnetic only, (MCP)

Breaker	IC at 480VAC	Trip unit type	Rating	Adjustment range	3 pole, 480VAC catalog number	List price
T3S	35kA	Mag only	100A	600 - 1200	T3S100MW	\$ 1074
			125A	750 - 1500	T3S125MW	1108
			150A	900 - 1800	T3S150MW	1299
			200A	1200 - 2400	T3S200MW	1382

T3S-D — Molded case switch

Breaker	Interrupting ① capacity	Rating	Magnetic trip	3 pole, 480VAC/500VDC catalog number	List price
T3S-D	240V, 65kA	150A	1500A	T3S150DW	\$ 1078
	480V, 35kA	225A	2250A	T3S225DW	1515

① With fuse or MCCB protected circuit.



T3

225A, 600Y/347V, 100% rated

Thermal-magnetic trip units

T3 – 225A Frame TMF, 100% rated

Breaker	IC at 480VAC	Rating	Magnetic trip	3 pole, 600/347V VAC/500VDC catalog number	List price
T3N	25kA	60A	600A	T3NQ060TW	\$ 656
		70A	700A	T3NQ070TW	812
		80A	800A	T3NQ080TW	
		90A	900A	T3NQ090TW	
		100A	1000A	T3NQ100TW	
		125A	1250A	T3NQ125TW	1717
		150A	1500A	T3NQ150TW	
		175A	1750A	T3NQ175TW	
		200A	2000A	T3NQ200TW	
		225A	2250A	T3NQ225TW	

Breaker	IC at 480VAC	Rating	Magnetic trip	3 pole, 600/347V VAC/500VDC catalog number	List price
T3S	35kA	60A	600A	T3SQ060TW	\$ 778
		70A	700A	T3SQ070TW	1065
		80A	800A	T3SQ080TW	
		90A	900A	T3SQ090TW	
		100A	1000A	T3SQ100TW	
		125A	1250A	T3SQ125TW	2399
		150A	1500A	T3SQ150TW	
		175A	1750A	T3SQ175TW	
		200A	2000A	T3SQ200TW	
		225A	2250A	T3SQ225TW	

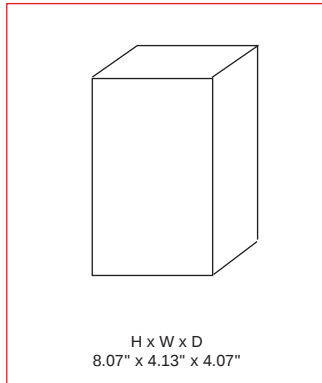
T4

250A, 600V

Electronic and thermal magnetic trip units



T3



H x W x D
8.07" x 4.13" x 4.07"

General

The T4 breaker is a 250 amp frame with either a microprocessor based over current protective trip system or a thermal magnetic trip unit. As an electronic breaker, the T4 is available in 100A, 150A and 250A frames. The T4 is available as a thermal magnetic unit from 20A to 250A.

Versions

To meet all application requirements, the T4 is available in the following versions:

- T = Thermal-magnetic, fixed
- B = Selectable & adjustable LI or LS
- C = Adjustable LSI
- E = Adjustable LSIG
- D = Molded Case Switch
- E5 = Electronic instantaneous only (MCP)

Trip functions

These trip functions are available:

- L = Long time
- S = Short time
- I = Instantaneous
- G = Ground fault

Performance levels

Each version is also available in different maximum fault interrupting levels:

- N = Normal
- S = Standard
- H = High
- L = Extra high
- V = Very high

Number of poles

The T4 is available as a 3 and 4 pole breaker. Estimate 4 pole pricing by adding 35% to the 3 pole price and contact your ABB sales person for details.

Accessory mounting

Internal accessories are UL/CSA approved for both factory and field installation. No extra control connectors are required for field connection. Shunt trips and UVRs mount in the left cavity and auxiliary contacts and bell alarms mount in the right cavity.

Reverse feeding

All versions of the T4 family are suitable for reverse feed applications.

UL489 / CSA C22.2 Interrupting capacity (kA RMS)

Voltage	N	S	H	L	V
240VAC	65	100	150	200	200
480VAC	25	35	65	100	150
600VAC	18	25	35	65	100
500VDC ①	25	35	50	65	100
600VDC ②	16	25	35	50	65

IEC-947 Interrupting capacity (kA RMS)

Voltage	N	S	H	L	V
230VAC	70	85	100	200	300
415VAC	36	50	70	120	200
440VAC	30	40	65	100	180
500VDC	25	30	50	85	150
690VDC	20	25	40	70	80

① 2 poles in series.

② 3 poles in series.



T4

250A, 600V

Electronic trip units (AC only)

100A Frame (40 - 100A adjustable range)

Breaker	Ic at 480VAC kA	Trip Unit	3 Pole, 600V Catalog number	List price
T4N	25	PR221 LS/I	T4N100BW	\$ 1903
		PR222 LSI	T4N100CW	2540
		PR222 LSIG	T4N100EW	3330
T4S	35	PR221 LS/I	T4S100BW	2370
		PR222 LSI	T4S100CW	3164
		PR222 LSIG	T4S100EW	4148
T4H	65	PR221 LS/I	T4H100BW	4498
		PR222 LSI	T4H100CW	4845
		PR222 LSIG	T4H100EW	5877
T4L	100	PR221 LS/I	T4L100BW	5954
		PR222 LSI	T4L100CW	6063
		PR222 LSIG	T4L100EW	7091
T4V	150	PR221 LS/I	T4V100BW	8555
		PR222 LSI	T4V100CW	9213
		PR222 LSIG	T4V100EW	9957

150A Frame (60 - 150A adjustable range)

Breaker	Ic at 480VAC kA	Trip Unit	3 Pole, 600V Catalog number	List price
T4N	25	PR221 LS/I	T4N150BW	\$ 2050
		PR222 LSI	T4N150CW	2737
		PR222 LSIG	T4N150EW	3588
T4S	35	PR221 LS/I	T4S150BW	2542
		PR222 LSI	T4S150CW	3394
		PR222 LSIG	T4S150EW	4449
T4H	65	PR221 LS/I	T4H150BW	4633
		PR222 LSI	T4H150CW	5024
		PR222 LSIG	T4H150EW	6094
T4L	100	PR221 LS/I	T4L150BW	6174
		PR222 LSI	T4L150CW	6288
		PR222 LSIG	T4L150EW	7354
T4V	150	PR221 LS/I	T4V150BW	8872
		PR222 LSI	T4V150CW	9555
		PR222 LSIG	T4V150EW	10,326

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250A Frame (100 - 250A adjustable range)

Breaker	Ic at 480VAC kA	Trip Unit	3 Pole, 600V Catalog number	List price
T4N	25	PR221 LS/I	T4N250BW	\$ 2112
		PR222 LSI	T4N250CW	2819
		PR222 LSIG	T4N250EW	3696
T4S	35	PR221 LS/I	T4S250BW	2573
		PR222 LSI	T4S250CW	3435
		PR222 LSIG	T4S250EW	4503
T4H	65	PR221 LS/I	T4H250BW	4713
		PR222 LSI	T4H250CW	5127
		PR222 LSIG	T4H250EW	6219
T4L	100	PR221 LS/I	T4L250BW	6300
		PR222 LSI	T4L250CW	6416
		PR222 LSIG	T4L250EW	7504
T4V	150	PR221 LS/I	T4V250BW	9053
		PR222 LSI	T4V250CW	9750
		PR222 LSIG	T4V250EW	10,537

T4 **250A, 600V** **Thermal magnetic trip units**



20A - 250A Frame

Breaker	IC at 480VAC kA	Rating	Magnetic trip	3 pole, 600VAC/600VDC Catalog number	List price
T4N	25	20A	500	T4N020TW	\$ 1517
		30A	500	T4N030TW	1517
		40A	500	T4N040TW	1517
		50A	500	T4N050TW	1517
		80A	400-800	T4N080TW	1547
		100A	500-1000	T4N100TW	1547
		125A	625-1250	T4N125TW	1667
		150A	750-1500	T4N150TW	1667
		200A	1000-2000	T4N200TW	1667
		250A	1250-2500	T4N250TW	1717
T4S	35	20A	500	T4S020TW	1887
		30A	500	T4S030TW	1887
		40A	500	T4S040TW	1887
		50A	500	T4S050TW	1887
		80A	400-800	T4S080TW	1927
		100A	500-1000	T4S100TW	1927
		125A	625-1250	T4S125TW	2067
		150A	750-1500	T4S150TW	2067
		200A	1000-2000	T4S200TW	2067
		250A	1250-2500	T4S250TW	2092
T4H	65	20A	500	T4H020TW	3617
		30A	500	T4H030TW	3617
		40A	500	T4H040TW	3617
		50A	500	T4H050TW	3617
		80A	400-800	T4H080TW	3657
		100A	500-1000	T4H100TW	3657
		125A	625-1250	T4H125TW	3767
		150A	750-1500	T4H150TW	3767
		200A	1000-2000	T4H200TW	3767
		250A	1250-2500	T4H250TW	3832
T4L	100	20A	500	T4L020TW	5915
		30A	500	T4L030TW	5915
		40A	500	T4L040TW	5915
		50A	500	T4L050TW	5915
		80A	400-800	T4L080TW	5965
		100A	500-1000	T4L100TW	5965
		125A	625-1250	T4L125TW	5995
		150A	750-1500	T4L150TW	5995
		200A	1000-2000	T4L200TW	5995
		250A	1250-2500	T4L250TW	6110
T4V	150	20A	500	T4V020TW	6780
		30A	500	T4V030TW	6780
		40A	500	T4V040TW	6780
		50A	500	T4V050TW	6780
		80A	400-800	T4V080TW	6817
		100A	500-1000	T4V100TW	6817
		125A	625-1250	T4V125TW	6847
		150A	750-1500	T4V150TW	6847
		200A	1000-2000	T4V200TW	6847
		250A	1250-2500	T4V250TW	6887

Molded case switch

Type	Amps	Magnetic trip	3 Pole, 600V Catalog number	List price
T4H-D	250	3000	T4H250DW	\$ 2154
T4L-D	250	3000	T4L250DW	3419
T4V-D	250	3000	T4V250DW	3842



T4

250A, 600V, 100% Rated Electronic trip units (AC only)

100A Frame (40 - 100A adjustable range)

Breaker	Ic at 480VAC kA	Trip Unit	3 Pole, 600V Catalog number	List price
T4N	25	PR221 LS/I	T4NQ100BW	\$ 2124
		PR222 LSI	T4NQ100CW	2835
		PR222 LSIG	T4NQ100EW	3716
T4S	35	PR221 LS/I	T4SQ100BW	2645
		PR222 LSI	T4SQ100CW	3531
		PR222 LSIG	T4SQ100EW	4629
T4H	65	PR221 LS/I	T4HQ100BW	5020
		PR222 LSI	T4HQ100CW	5383
		PR222 LSIG	T4HQ100EW	6530
T4L	100	PR221 LS/I	T4LQ100BW	6616
		PR222 LSI	T4LQ100CW	6737
		PR222 LSIG	T4LQ100EW	7879
T4V	150	PR221 LS/I	T4VQ100BW	9506
		PR222 LSI	T4VQ100CW	10,237
		PR222 LSIG	T4VQ100EW	11,063

150A Frame (60 - 150A adjustable range)

Breaker	Ic at 480VAC kA	Trip Unit	3 Pole, 600V Catalog number	List price
T4N	25	PR221 LS/I	T4NQ150BW	\$ 2288
		PR222 LSI	T4NQ150CW	3055
		PR222 LSIG	T4NQ150EW	4004
T4S	35	PR221 LS/I	T4SQ150BW	2837
		PR222 LSI	T4SQ150CW	3788
		PR222 LSIG	T4SQ150EW	4965
T4H	65	PR221 LS/I	T4HQ150BW	5171
		PR222 LSI	T4HQ150CW	5582
		PR222 LSIG	T4HQ150EW	6771
T4L	100	PR221 LS/I	T4LQ150BW	6860
		PR222 LSI	T4LQ150CW	6987
		PR222 LSIG	T4LQ150EW	8171
T4V	150	PR221 LS/I	T4VQ150BW	9858
		PR222 LSI	T4VQ150CW	10,616
		PR222 LSIG	T4VQ150EW	11,473

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250A Frame (100 - 250A adjustable range)

Breaker	Ic at 480VAC kA	Trip Unit	3 Pole, 600V Catalog number	List price
T4N	25	PR221 LS/I	T4NQ250BW	\$ 2357
		PR222 LSI	T4NQ250CW	3146
		PR222 LSIG	T4NQ250EW	4125
T4S	35	PR221 LS/I	T4SQ250BW	2872
		PR222 LSI	T4SQ250CW	3834
		PR222 LSIG	T4SQ250EW	5025
T4H	65	PR221 LS/I	T4HQ250BW	5260
		PR222 LSI	T4HQ250CW	5697
		PR222 LSIG	T4HQ250EW	6910
T4L	100	PR221 LS/I	T4LQ250BW	7000
		PR222 LSI	T4LQ250CW	7129
		PR222 LSIG	T4LQ250EW	8338
T4V	150	PR221 LS/I	T4VQ250BW	10,058
		PR222 LSI	T4VQ250CW	10,833
		PR222 LSIG	T4VQ250EW	11,708

T4

250A, 600V, 100% rated thermal-magnetic trip units

Magnetic only MCPs

Tmax
MCCBs

30A - 250A Frame

Breaker	IC at 480 VAC kA	Rating	Magnetic trip	3 pole, 600VAC/600VDC Catalog number	List price
T4N	25	20A	500	T4NQ020TW	\$ 1673
		30A	500	T4NQ030TW	1673
		40A	500	T4NQ040TW	1673
		50A	500	T4NQ050TW	1673
		80A	400-800	T4NQ080TW	1706
		100A	500-1000	T4NQ100TW	1706
		125A	625-1250	T4NQ125TW	1839
		150A	750-1500	T4NQ150TW	1839
		200A	1000-2000	T4NQ200TW	1839
		250A	1250-2500	T4NQ250TW	1894
T4S	35	20A	500	T4SQ020TW	2081
		30A	500	T4SQ030TW	2081
		40A	500	T4SQ040TW	2081
		50A	500	T4SQ050TW	2081
		80A	400-800	T4SQ080TW	2125
		100A	500-1000	T4SQ100TW	2125
		125A	625-1250	T4SQ125TW	2280
		150A	750-1500	T4SQ150TW	2280
		200A	1000-2000	T4SQ200TW	2280
		250A	1250-2500	T4SQ250TW	2307
T4H	65	20A	500	T4HQ020TW	3990
		30A	500	T4HQ030TW	3990
		40A	500	T4HQ040TW	3990
		50A	500	T4HQ050TW	3990
		80A	400-800	T4HQ080TW	4034
		100A	500-1000	T4HQ100TW	4034
		125A	625-1250	T4HQ125TW	4155
		150A	750-1500	T4HQ150TW	4155
		200A	1000-2000	T4HQ200TW	4155
		250A	1250-2500	T4HQ250TW	4227
T4L	100	20A	500	T4LQ020TW	6524
		30A	500	T4LQ030TW	6524
		40A	500	T4LQ040TW	6524
		50A	500	T4LQ050TW	6524
		80A	400-800	T4LQ080TW	6579
		100A	500-1000	T4LQ100TW	6579
		125A	625-1250	T4LQ125TW	6612
		150A	750-1500	T4LQ150TW	6612
		200A	1000-2000	T4LQ200TW	6612
		250A	1250-2500	T4LQ250TW	6739
T4V	150	20A	500	T4VQ020TW	7478
		30A	500	T4VQ030TW	7478
		40A	500	T4VQ040TW	7478
		50A	500	T4VQ050TW	7478
		80A	400-800	T4VQ080TW	7519
		100A	500-1000	T4VQ100TW	7519
		125A	625-1250	T4VQ125TW	7552
		150A	750-1500	T4VQ150TW	7552
		200A	1000-2000	T4VQ200TW	7552
		250A	1250-2500	T4VQ250TW	7569

Magnetic-only MCPs

T4 - 250A Frame magnetic only (MCP - AC only)

Breaker	IC at 480VAC	Trip unit type	Rating	Adjustment range	3 pole, 600VAC Catalog number	List price
T4N	25kA	Instantaneous only	100A	100-1000	T4N100E5W	\$ 1808
			150A	150-1500	T4N150E5W	1948
			250A	250-2500	T4N250E5W	2006
T4S	35kA	Instantaneous only	100A	100-1000	T4S100E5W	2252
			150A	150-1500	T4S150E5W	2415
			250A	250-2500	T4S250E5W	2444
T4H	65kA	Instantaneous only	100A	100-1000	T4H100E5W	4273
			150A	150-1500	T4H150E5W	4401
			250A	250-2500	T4H250E5W	4477
T4L	100kA	Instantaneous only	100A	100-1000	T4L100E5W	5656
			150A	150-1500	T4L150E5W	5865
			250A	250-2500	T4L250E5W	5985



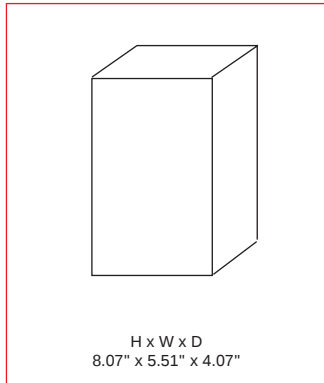
T5

600A, 600V

Electronic and thermal magnetic trip units



T5



H x W x D
8.07" x 5.51" x 4.07"

General

The T5 breaker is a 600 amp frame with either a microprocessor based over current protective trip system or a thermal magnetic trip unit. As an electronic breaker, the T5 is available in 300A, 400A and 600A frames. The T5 is available as a thermal magnetic unit of 300A or 400A.

Versions

To meet all application requirements, the T5 is available in the following versions:

- T = Thermal-magnetic
- B = Selectable & adjustable LI or LS
- C = Adjustable LSI
- E = Adjustable LSIg
- D = Molded Case Switch
- E5 = Electronic instantaneous only (MCP)

Trip functions

These trip functions are available:

- L = Long time
- S = Short time
- I = Instantaneous
- G = Ground fault

Performance levels

Each version is also available in different maximum fault interrupting levels:

- N = Normal
- S = Standard
- H = High
- L = Extra high
- V = Very high

Number of poles

The T5 is available as a 3 and 4 pole breaker. Estimate 4 pole pricing by adding 35% to the 3 pole price and contact your ABB sales person for details.

Accessory mounting

Internal accessories are UL/CSA approved for both factory and field installation. No extra control connectors are required for field connection. Shunt trips and UVRs mount in the left cavity and auxiliary contacts and bell alarms mount in the right cavity.

Reverse feeding

All versions of the T5 family are suitable for reverse feed applications.

UL489 / CSA C22.2 Interrupting capacity (kA RMS)

Voltage	N	S	H	L	V
240VAC	65	100	150	200	200
480VAC	25	35	65	100	150
600VAC	18	25	35	65	100
500VDC ①	25	35	50	65	100
600VDC ②	16	25	35	50	65

IEC-947 Interrupting capacity (kA RMS)

Voltage	N	S	H	L	V
230VAC	70	85	100	200	300
415VAC	36	50	70	120	200
440VAC	30	40	65	100	180
500VDC	25	30	50	85	150
690VDC	20	25	40	70	80

① 2 poles in series.

② 3 poles in series.

T5
600A, 600V
Electronic trip units (AC only)



300A Frame

Breaker	Ic at 480VAC kA	Trip Unit	3 Pole, 600V Catalog number	List price
T5N	25	PR221 LS/I	T5N300BW	\$ 3260
		PR222 LSI	T5N300CW	3865
		PR222 LSIG	T5N300EW	4965
T5S	35	PR221 LS/I	T5S300BW	3350
		PR222 LSI	T5S300CW	3945
		PR222 LSIG	T5S300EW	5138
T5H	65	PR221 LS/I	T5H300BW	5395
		PR222 LSI	T5H300CW	5893
		PR222 LSIG	T5H300EW	7148
T5L	100	PR221 LS/I	T5L300BW	6860
		PR222 LSI	T5L300CW	7375
		PR222 LSIG	T5L300EW	8625
T5V	150	PR221 LS/I	T5V300BW	10,406
		PR222 LSI	T5V300CW	11,206
		PR222 LSIG	T5V300EW	12,111

400A Frame

Breaker	Ic at 480VAC kA	Trip Unit	3 Pole, 600V Catalog number	List price
T5N	25	PR221 LS/I	T5N400BW	\$ 3260
		PR222 LSI	T5N400CW	3865
		PR222 LSIG	T5N400EW	4965
T5S	35	PR221 LS/I	T5S400BW	3350
		PR222 LSI	T5S400CW	3945
		PR222 LSIG	T5S400EW	5138
T5H	65	PR221 LS/I	T5H400BW	5395
		PR222 LSI	T5H400CW	5893
		PR222 LSIG	T5H400EW	7148
T5L	100	PR221 LS/I	T5L400BW	6860
		PR222 LSI	T5L400CW	7375
		PR222 LSIG	T5L400EW	8625
T5V	150	PR221 LS/I	T5V400BW	10,406
		PR222 LSI	T5V400CW	11,206
		PR222 LSIG	T5V400EW	12,111

600A Frame

Breaker	Ic at 480VAC kA	Trip Unit	3 Pole, 600V Catalog number	List price
T5N	25	PR221 LS/I	T5N600BW	\$ 5750
		PR222 LSI	T5N600CW	6460
		PR222 LSIG	T5N600EW	8360
T5S	35	PR221 LS/I	T5S600BW	5910
		PR222 LSI	T5S600CW	6595
		PR222 LSIG	T5S600EW	8645
T5H	65	PR221 LS/I	T5H600BW	8170
		PR222 LSI	T5H600CW	8805
		PR222 LSIG	T5H600EW	10,890
T5L	100	PR221 LS/I	T5L600BW	9860
		PR222 LSI	T5L600CW	10,440
		PR222 LSIG	T5L600EW	12,630
T5V	150	PR221 LS/I	T5V600BW	13,550
		PR222 LSI	T5V600CW	14,375
		PR222 LSIG	T5V600EW	16,350



T5

400A, 600V

Thermal magnetic trip units ①

300A - 400A Frames

Breaker	IC at 480VAC kA	Rating	Magnetic trip	3 pole, 600VAC/600VDC Catalog number	List price
T5N	25	300A 400A	1500-3000 2000-4000	T5N300TW T5N400TW	\$ 2612
T5S	35	300A 400A	1500-3000 2000-4000	T5S300TW T5S400TW	2880
T5H	65	300A 400A	1500-3000 2000-4000	T5H300TW T5H400TW	4950
T5L	100	300A 400A	1500-3000 2000-4000	T5L300TW T5L400TW	6400
T5V	150	300A 400A	1500-3000 2000-4000	T5V300TW T5V400TW	9873

Molded case switch

Type	Amps	Magnetic trip	3 Pole, 600V Catalog number	List price
T5H-D	400	5000	T5H400DW	\$ 4585
T5H-D	600	6000	T5H600DW	6550
T5L-D	600	6000	T5L600DW	8350
T5V-D	600	6000	T5V600DW	11,575

① 600A not available with thermal magnetic trip unit.

T5

400A, 600V, 100% Rated ①



Electronic trip units (AC only)

300A Frame

Breaker	Ic at 480VAC kA	Trip Unit	3 Pole, 600V Catalog number	List price
T5N	25	PR221 LS/I	T5NQ300BW	\$ 3628
		PR222 LSI	T5NQ300CW	4302
		PR222 LSIG	T5NQ300EW	5526
T5S	35	PR221 LS/I	T5SQ300BW	3729
		PR222 LSI	T5SQ300CW	4391
		PR222 LSIG	T5SQ300EW	5719
T5H	65	PR221 LS/I	T5HQ300BW	6005
		PR222 LSI	T5HQ300CW	6559
		PR222 LSIG	T5HQ300EW	7956
T5L	100	PR221 LS/I	T5LQ300BW	7635
		PR222 LSI	T5LQ300CW	8208
		PR222 LSIG	T5LQ300EW	9600
T5V	150	PR221 LS/I	T5VQ300BW	11,582
		PR222 LSI	T5VQ300CW	12,473
		PR222 LSIG	T5VQ300EW	13,480

400A Frame

Breaker	Ic at 480VAC kA	Trip Unit	3 Pole, 600V Catalog number	List price
T5N	25	PR221 LS/I	T5NQ400BW	\$ 3628
		PR222 LSI	T5NQ400CW	4302
		PR222 LSIG	T5NQ400EW	5526
T5S	35	PR221 LS/I	T5SQ400BW	3729
		PR222 LSI	T5SQ400CW	4391
		PR222 LSIG	T5SQ400EW	5719
T5H	65	PR221 LS/I	T5HQ400BW	6005
		PR222 LSI	T5HQ400CW	6559
		PR222 LSIG	T5HQ400EW	7956
T5L	100	PR221 LS/I	T5LQ400BW	7635
		PR222 LSI	T5LQ400CW	8208
		PR222 LSIG	T5LQ400EW	9600
T5V	150	PR221 LS/I	T5VQ400BW	11,582
		PR222 LSI	T5VQ400CW	12,473
		PR222 LSIG	T5VQ400EW	13,480

Thermal magnetic trip units

300A - 400A Frames

Breaker	IC at 480VAC kA	Rating	Magnetic trip	3 pole, 600VAC/600VDC Catalog number	List price
T5N	25	300A	1500-3000	T5NQ300TW	\$ 2888
		400A	2000-4000	T5NQ400TW	
T5S	35	300A	1500-3000	T5SQ300TW	3185
		400A	2000-4000	T5SQ400TW	
T5H	65	300A	1500-3000	T5HQ300TW	5475
		400A	2000-4000	T5HQ400TW	
T5L	100	300A	1500-3000	T5LQ300TW	7078
		400A	2000-4000	T5LQ400TW	
T5V	150	300A	1500-3000	T5VQ300TW	10,920
		400A	2000-4000	T5VQ400TW	

① 600A not available in 100% rated frame.



T5 400A, 600V ① Magnetic only, MCP

T5 - 400A Frame magnetic only (MCP - AC only)

Breaker	IC at 480VAC	Trip unit type	Rating	Adjustment range	3 pole, 600VAC Catalog number	List price
T5N	25kA	Instantaneous only	300A 400A	300-3000 400-4000	T5N300E5W T5N400E5W	\$ 3097
T5S	35kA	Instantaneous only	300A 400A	300-3000 400-4000	T5S300E5W T5S400E5W	3183
T5H	65kA	Instantaneous only	300A 400A	300-3000 400-4000	T5H300E5W T5H400E5W	5125
T5L	100kA	Instantaneous only	300A 400A	300-3000 400-4000	T5L300E5W T5L400E5W	6517

T5 - 600A Frame magnetic only (MCP - AC only)

Breaker	IC at 480VAC	Trip unit type	Rating	Adjustment range	3 pole, 600VAC Catalog number	List price
T5N	25kA	Instantaneous only	600A	600-6000	T5N600E5W	\$ 5615
T5S	35kA	Instantaneous only	600A	600-6000	T5S600E5W	5770
T5H	65kA	Instantaneous only	600A	600-6000	T5H600E5W	7761
T5L	100kA	Instantaneous only	600A	600-6000	T5L600E5W	9370

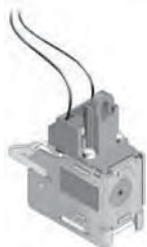
① 600A Not available with thermal magnetic trip unit.

Accessories

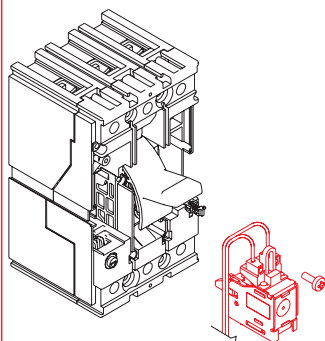
Electrical

T1 - T3

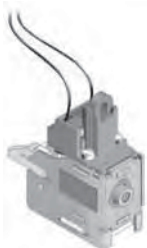
Tmax
MCCBs



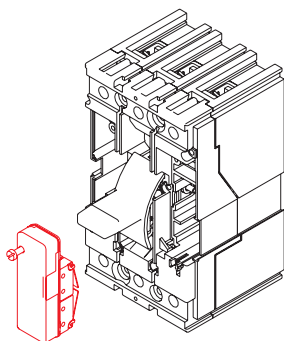
KT3S4



T1 with KT3S4



KT3U2



T1 with KT3AS



KT3M1

Shunt trips

Voltage	Factory installation		Field installation	
	Catalog number suffix ①	List price adder	Catalog number T1 - T3	List price
480 - 500VAC	S1	\$ 535	KT3S1	\$ 490
220/250VAC/DC	S2		KT3S2	
380 - 440VAC	S3		KT3S3	
110 - 125VAC/DC	S4		KT3S4	
48 - 60VAC/DC	S7		KT3S7	
24 - 30VAC/DC	S8		KT3S8	
12VDC	S9		KT3S9	

For remote opening of circuit breaker and includes internal cut-off switch to protect solenoid. All shunt trips are left pole mounted and can not be used with undervoltage releases. All shunt trips are approved for use in ground fault systems.

Electrical specifications

Voltage	AC VA	DC Watts
24, 120, 240	50	50
48 - 60	60	60
480 - 500	55	—

Undervoltage releases

Voltage	Factory installation		Field installation	
	Catalog number suffix ①	List price adder	Catalog number T1 - T3	List Price
480 - 500VAC	U1	\$ 535	KT3U1	\$ 490
220 - 250VAC/DC	U2		KT3U2	
380 - 440VAC	U3		KT3U3	
110 - 125VAC/DC	U4		KT3U4	
60VAC/DC	U5		KT3U5	
48VAC/DC	U7		KT3U7	
24 - 30VAC/DC	U8		KT3U8	

Will trip circuit breaker when connected voltage drops to 35 - 70% of undervoltage release voltage rating. Will allow circuit breaker to close (ON) when voltage is approximately 85% of rated voltage. All undervoltage releases are left pole mounted and can not be used with shunt trips.

Electrical specifications

Voltage	AC VA	DC Watts
24	1.5	1.5
48 - 60	1	1
120	2	2
220 - 250	2.5	2.5
480 - 500	4	—

Auxiliary contacts — T1 - T3

Contacts	Factory installation		Field installation	
	Catalog number suffix	List price adder	Catalog number	List Price
1 Form C + 1 BA	A	\$ 433	KT3AS	\$ 380
3 Form C + 1 BA	A3	770	KT3AS3	725
T2 PR221DS 1 Form C + 1 BA	A	433	KT2AS-E	380
3 form C + 1 BA 24VDC	A3AU	770	KT3AS3-AU	725

Electrical operators

Voltage	Field installation	
	Catalog number	List Price
48 - 60VAC/DC	KT3M1	\$ 850
110 - 250VAC/DC	KT3M2	

Electrical specifications

Voltage range	Inrush power
85 - 110% rated voltage	2500VA / 1000W

① For factory installation add suffix given to end of circuit breaker catalog number per accessory format.



Accessories Mechanical T1 - T3



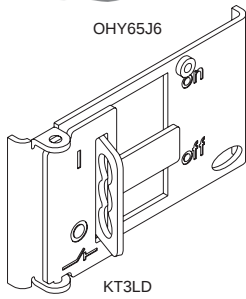
KT3RH



OHB65J6



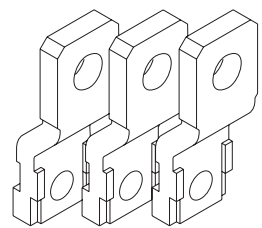
OHY65J6



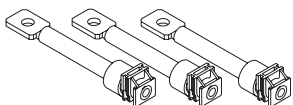
KT3LD



KT3100-3



KT2EF-3



KT2R-3

Direct mount rotary operator handle

	Catalog number	List price
Direct mount rotary	KT3RH	\$ 146

Variable depth rotary handles

Frame	Mechanism catalog number	List price	Shaft catalog number	List price	Handle catalog number	List price
NEMA 1, 3R, 12						
Tmax	KT3VD-M	\$ 72	OXP6X430 ①	\$ 28	OHY65J6 ① OHB65J6 ①	\$ 80
NEMA 4, 4X						
Tmax	KT3VD-M	72	OXP6X430 ①	28	OHY80L6 ① OHB80L6 ①	130
NEMA 1						
Tmax	KT3VD-M	72	KT3VD-S	35	KT3VD-H	87

Locking device

	Catalog number	List price
Locking device, open/closed	KT3LD	\$ 35
Locking device, open	KT3LDO	35

Lugs

For breakers	Amps	Wire size	Set of 3 catalog number	List price	Set of 4 catalog number	List price number
Standard cable lugs						
T1	100	14AWG-1/0	Integral	—	Integral	—
T2	100	14AWG-1/0	KT2100-3	\$ 9	KT2100-4	\$ 12
T3	60 100 150 225	14AWG -2AWG 14AWG -1/0 2AWG-4/0 4AWG-300kcmil	KT3060-3 KT3100-3 KT3150-3 KT3225-3	9 9 12 18	KT3060-4 KT3100-4 KT3150-4 KT3225-4	12 12 18 24

Standard cable lug kits with power controls taps

For breakers	Amps	Wire size	Set of 3		Set of 4	
			Catalog number	List price	Catalog number	List price
T3	100 150 225	14AWG - 1/0 2AWG - 4/0 4AWG - 350kcmil	KT3100-3C KT3150-3C KT3225-3C	\$ 16 16 25	KT3100-4C KT3150-4C KT3225-4C	\$ 19 19 31

Extended front terminals

For breakers	Amps	Set of 3		Set of 4	
		Catalog number	List price adder	Catalog number	List Price
T2	100	KT2EF-3	\$ 26	KT2EF-4	\$ 35
T3	225	KT3EF-3	33	KT3EF-4	44

Rear terminals

For breakers	Amps	Set of 3		Set of 4	
		Catalog number	List price adder	Catalog number	List Price
T2	100	KT2R-3	\$ 78	KT2R-4	\$ 105
T3	225	KT3R-3	98	KT3R-4	131

Distribution cable lug kit	Amps	Set of 3		
		Wire range	Catalog number	List Price
T3	225	(6) #14-6	KT3TN	\$ 125

OHB 65 J 6

Color

B = Black
Y = Red/Yellow

Physical size (length in mm)

Shaft size (diameter in mm)

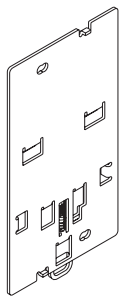
J = Type 1, 3R, 12

L = Type 1, 3R, 12, 4, 4X

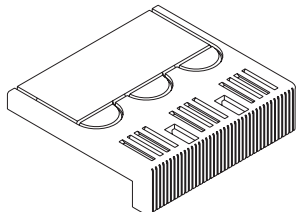
① Use Discount Schedule H6.

Accessories Mechanical T1 - T3

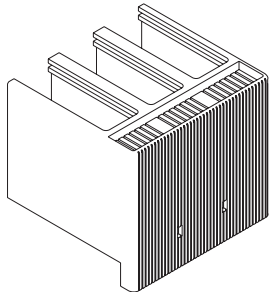
Tmax
MCCBs



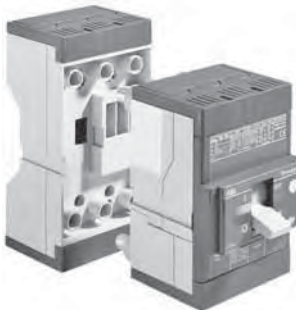
KT2DIN



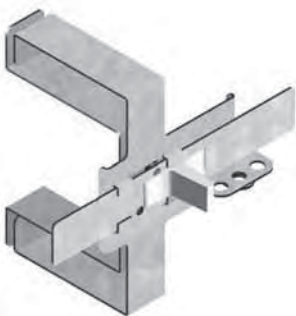
KT1LTC-3



KT1HTC-3



KT2PFF + KT2PMK (on back of breaker) +
breaker



KT3MIF2

DIN Rail mounting kits — 35mm DIN ①

For breakers	Catalog number	List price
T1 / T2	KT2DIN	\$ 33
T3	KT3DIN	41

Terminal covers for fixed breakers

Low Profile

For breakers	Low profile 3-pole		Low profile 4-pole	
	Catalog number	List price	Catalog number	List Price
T1	KT1LTC-3	\$ 35	KT1LTC-4	\$ 47
T2	KT2LTC-3	40	KT2LTC-4	54
T3	KT3LTC-3	50	KT3LTC-4	68

High Profile

For breakers	High profile 3-pole		High profile 4-pole	
	Catalog number	List price	Catalog number	List Price
T1	KT1HTC-3	\$ 37	KT1HTC-4	\$ 50
T2	KT2HTC-3	43	KT2HTC-4	58
T3	KT3HTC-3	53	KT3HTC-4	72

Kit consists of two pieces.

Plug-in kits for T2 and T3 ②

For breakers	Moving part		Fixed part	
	Catalog number	List price	Catalog number	List Price
T2 — 3-Pole	KT2PMK	\$ 171	KT2PFF	\$ 238
T3 — 3-Pole	KT3PMK	190	KT3PFF	264

Fixed parts accept the same cable and rear terminal kits as the circuit breakers.

Sliding bar interlock — front mounted

For breakers	For 2 breakers		For 3 breakers	
	Catalog number	List price	Catalog number	List Price
T1 – T3	KT3MIF2	\$ 625	KT3MIF3	\$ 844

Plug connectors

Item	3 Way	6 Way	12 Way	Catalog number	List price
Shunt trip or UVR	■			KT3PC-3	\$ 18
1 form C + 1BA auxiliary contact		■		KT3PC-6	21
3 form C + 1BA auxiliary contact			■	KT3PC-12	24

Cable kits

Item	Catalog number	List price
2 Cables, 2M	KT3PC-2CK	\$ 18
6 Cables, 2M	KT3PC-6CK	24
12 Cables, 2M	KT3PC-12CK	30

① For use with 15mm high DIN rail.

② Plug connectors and cable kit required when mounting accessories.



External accessories

Flange handle operators

T1 – T3

Flange handle — Cable linkage

Breaker	NEMA Type	Mechanism only	List price	Cable only	Cable length	List price	Handle only	List price
T1/T2	1,3R,12	KT2FPM	\$ 123	K5C036	36" (91cm)	\$ 114	K5FCH	\$ 213
T1/T2	4,4X	KT2FPM		K5C048	48" (122cm)	146	K5FCH4	243
T3	1,3R,12	KT3FPM		K5C060	60" (152cm)	160	K5FCH	213
T3	4,4X	KT3FPM		K5C072	72" (183cm)	175	K5FCH4	243

Notes: For complete assembly; mechanism, cable and handle are required.
All cables mount onto the right side of the breaker.
Handle can be mounted on the right or left side.

Door hardware kits — T1 - T5 Cable operated

Item	Catalog number	List price
Door hardware kit, right hand, 2 point latch for enclosures less than 40 inches high	KDH2R	\$ 200
Door hardware kit, right hand, 3 point latch for enclosures 40 inches high or greater	KDH3R	225

Enclosure depths

Minimum

Breaker	Depth (inches)
T1 - T3	8

Maximum

Maximum depth is determined by cable length.

Accessories Electrical T4 - T5

Tmax
MCCBs

Shunt trips (Standard)

Voltage	Factory installation		Field installation	
	Catalog number suffix ①	List price adder	Catalog number T4 – T5	List price
480 – 500VAC 220/250VAC/DC 380 – 440VAC 110 – 125VAC/DC 48 – 60VAC/DC 24 VAC/DC 12VDC	S1 S2 S3 S4 S7 S8 S9	\$ 535	KT5S1 KT5S2 KT5S3 KT5S4 KT5S7 KT5S8 KT5S9	\$ 490

Shunt trip (Permanent supply)

Voltage	Factory installation		Field installation	
	Catalog number suffix ①	List price adder	Catalog number T4 – T5	List price
110 – 120 VAC 24 – 30 VAC/DC	SP4 SP8	\$ 535	KT5SP4 KT5SP8	\$ 490

Undervoltage release

Voltage	Factory installation		Field installation	
	Catalog number suffix ①	List price adder	Catalog number T4 – T5	List Price
480 – 500 VAC 220 – 250 VAC/DC 380 – 440 VAC 110 – 125 VAC/DC 60 VAC/DC 48 VAC/DC 24 VAC/DC	U1 U2 U3 U4 U5 U7 U8	\$ 535	KT5U1 KT5U2 KT5U3 KT5U4 KT5U5 KT5U7 KT5U8	\$ 490

Auxiliary contacts

Contacts	Factory installation		Field installation	
	Catalog number suffix	List price adder	Catalog number	List Price
1 Form C + 1 BA, 250 VAC/VDC 3 Form C + 1 BA, 250 VAC/VDC 3 Form C + 1 BA, 24 VDC	A A3 A3AU	\$ 433 770 770	KT5AS KT5AS3 KT5AS3-AU	\$ 380 725 725

Stored energy motor operator

Voltage	Field installation	
	Catalog number	List Price
220 – 250 VAC/DC 110 – 125 VAC/DC 48 – 60 VDC 24 VDC	KT5M2 KT5M4 KT5M7 KT5M8	\$ 2385

Stored energy motor operator – Contact remote/manual operation

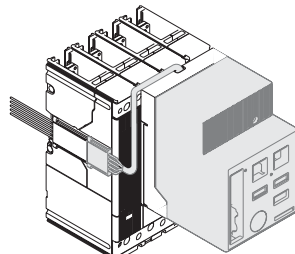
Contacts	Factory installation		Field installation	
	Catalog number suffix	List price adder	Catalog number	List Price
1 Form C	MA	\$ 265	KT5MA	\$ 220

Adapters ②

Item	6 Way	10 Way	12 Way	Catalog number	List price
1 Form C + 1BA	■			KT5ADP-6	\$ 24
Shunt trip / UVR	■			KT5ADP-6	24
Stored energy motor operator		■		KT5ADP-10	30
Stored energy motor operator plus shunt trip/UVR		■		KT5ADP-10	30
3 Form C + 1BA			■	KT5ADP-12	35

① For factory installation add suffix given to end of circuit breaker catalog number per accessory format.

② Required when mounting accessories on plug-in/drawout breakers



KT5M2

Accessories

Mechanical

T4 - T5



KT5RH

Direct mount rotary operator handle

Item	Catalog number	List Price
Direct mount rotary handle (for fixed and plug-in breakers)	KT5RH	\$ 135
Direct mount rotary handle (for withdrawable breakers)	KT5RHW	

Variable depth rotary handles

Item	Catalog number	List Price
Mechanism	KT5VD-M	\$ 65
NEMA 1, 12, 3R Handle (Black)	OHB95J10 ①	80
NEMA 1, 12, 3R Handle (Grey)	OHG95J10 ①	80
NEMA 4, 4X Handle (Black)	OHB95L10 ①	120
NEMA 4, 4X Handle (Grey)	OHG95L10 ①	120
Shaft (148mm / 5.8 in)	EXP10X148 ①	24
Shaft (225mm / 8.9 in)	EXP10X225 ①	26
Shaft (500mm / 19.7 in)	EXP10X500 ①	32
NEMA 1 Handle, square profile	KT5VD-H	87
Shaft (500mm/19.7in)	KT5VD-S	

Locking devices

	Catalog number	List price
Locking device	KT5FLD	\$ 40
Locking device draw out	KT5FLDW	55

Plug-in kits

Contacts	Breaker adapter kit		Plug-in base	
	Catalog number suffix	List price adder	Catalog number	List Price
T4, 3 pole with extended front terminal	KT4PMK	\$ 250	KT4PFEE	\$ 710
T4, 3 pole with rear horizontal terminal			KT4PFHR	766
T4, 3 pole with rear vertical terminal			KT4PFVR	766
T5, 3 pole with extended front terminal	KT5PMK	350	KT5PFEE	810
T5, 3 pole with rear horizontal terminal			KT5PFHR	866
T5, 3 pole with rear vertical terminal			KT5PFVR	866

Draw-out kits

Contacts	Breaker adapter kit		Plug-in base	
	Catalog number suffix	List price adder	Catalog number	List price
T4, 3 pole with extended front terminal	KT4WMK	\$ 290	KT4WFEE	\$ 816
T4, 3 pole with rear horizontal terminal			KT4WFHR	1021
T4, 3 pole with rear vertical terminal			KT4WFVR	1021
T5, 3 pole with extended front terminal	KT5WMK	407	KT5WFEE	931
T5, 3 pole with rear horizontal terminal			KT5WFHR	1154
T5, 3 pole with rear vertical terminal			KT5WFVR	1154

Standard cable lugs

For breakers	Amps	Wire size	Set of 2 catalog number	List price	Set of 3 catalog number	List price	Set of 4 catalog number	List price
T4	100	14 AWG-1/0	KT4100-2	\$ 6	KT4100-3	\$ 9	KT4100-4	\$ 12
	250	6 AWG - 350 kcmil	KT4250-2	20	KT4250-3	30	KT4250-4	40
T5	300	250kcmil - 500 kcmil	KT5300-2	30	KT5300-3	45	KT5300-4	60
	400	(2) 3/0 - 250 kcmil	KT5400-2	30	KT5400-3	45	KT5400-4	60
T5	600	(2) 3/0 - 500 kcmil	KT5600-2	TBD	KT5600-3	TBD	KT5600-4	TBD

Standard cable lug kits with power control taps

For breakers	Amps	Wire size	Set of 2 catalog number	List price	Set of 3 catalog number	List price	Set of 4 catalog number	List price
T4	100	14 AWG-1/0	KT4100-2C	\$ 10	KT4100-3C	\$ 15	KT4100-4C	\$ 20
	250	6 AWG - 350 kcmil	KT4250-2C	24	KT4250-3C	36	KT4250-4C	48
T5	300	250 kcmil - 500 kcmil	KT5300-2C	34	KT5300-3C	51	KT5300-4C	68
	400	(2) 3/0 - 250 kcmil	KT5400-2C	34	KT5400-3C	51	KT5400-4C	68

① Use Discount schedule SH



KT4PFVR

KT4PMK (on back of breaker)



KT5WFVR

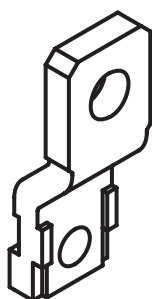
KT4WMK (on back of breaker)

Accessories

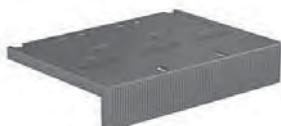
Mechanical

T4 - T5

Tmax
MCCBs



KT4EF-3



KT4LTC-3



KT4HTC-3

Extended front terminals

Breaker	Amps	Set of three		Set of four	
		Catalog number suffix	List price adder	Catalog number	List Price
T4	250	KT4EF-3	\$ 55	KT4EF-4	\$ 73
T5	400	KT5EF-3	115	KT5EF-4	155

Rear terminals

Breaker	Amps	Set of three		Set of four	
		Catalog number suffix	List price adder	Catalog number	List Price
T4	250	KT4R-3	\$ 60	KT4R-4	\$ 80
T5	400	KT5R-3	122	KT5R-4	163

Distribution cable lug kit

Breaker	Amps	Wire range	Set of 3 catalog number	List price
T4	250	(6) #14-6	KT4TN	\$ 125
T5	400	(6) #14-1/0	KT5TGD	240

Terminal covers for fixed breakers

Low profile

For breakers	Low profile 3-pole		Low profile 4-pole	
	Catalog number	List price	Catalog number	List price
T4	KT4LTC-3	\$ 55	KT4LTC-4	\$ 74
T5	KT5LTC-3	60	KT5LTC-4	81

High profile

For breakers	High profile 3-pole		High profile 4-pole	
	Catalog number	List price	Catalog number	List price
T4	KT4HTC-3	\$ 58	KT4HTC-4	\$ 78
T5	KT5HTC-3	63	KT5HTC-4	85

Mechanical interlock plate — complete assembly consists of one frame and one plate

Interlock frame				Catalog number	List price
Mechanical interlock horizontal frame				KT5MIR-HB	\$ 490
Mechanical interlock vertical frame				KT5MIR-VB	588
Plate type				Catalog number	List price
A	T4 (F-P-W)	+	T4 (F-P-W)	KT5MIR-PA	\$ 210
B	T4 (F-P-W)	+	T5 400 (F-P-W) or T5 630 (F)	KT5MIR-PB	
C	T4 (F-P-W)	+	T5 630 (P-W)	KT5MIR-PC	
D	T5 400 (F-P-W) or T5 630 (F)	+	T5 400 (F-P-W) or 630 (F)	KT5MIR-PD	
E	T5 400 (F-P-W) or T5 630 (F)	+	T5 630 (P-W)	KT5MIR-PE	
F	T5 630 (P-W)	+	T5 630 (P-W)	KT5MIR-PF	



External accessories

Flange handle operators

T4 & T5

Flange handle — Cable linkage

Breaker	NEMA Type	Mechanism only	List price	Cable only	Cable length	List price	Handle only	List price
T4	1, 3R, 12	KT4FPM	\$ 148	K5C036	36" (91 _{cm})	\$ 114	K5FCH	\$ 213
T4	4, 4X	KT4FPM		K5C048	48" (122 _{cm})	146	K5FCH4	243
T5	1, 3R, 12	KT5FPM	193	K5C060	60" (152 _{cm})	160	K5FCH	213
T5	4, 4X	KT5FPM		K5C060	72" (183 _{cm})	175	K5FCH4	243
—	—	—	—	K5C084	84" (213 _{cm})	204	—	—
—	—	—	—	K5C096	96" (244 _{cm})	221	—	—
—	—	—	—	K5C108	108" (274 _{cm})	238	—	—
—	—	—	—	K5C120	120" (305 _{cm})	256	—	—

Notes: For complete assembly; mechanism, cable and handle are required.
 All cables mount onto the right side of the breaker.
 Handle can be mounted on the right or left side.

Door hardware kits – T4 & T5 Cable operated

Item	Catalog number	List price
Door hardware kit, right hand, 2 point latch for enclosures less than 40 inches high	KDH2R	\$ 200
Door hardware kit, right hand, 3 point latch for enclosures 40 inches high or greater	KDH3R	225

Enclosure depths

Minimum

Breaker	Depth (inches)
T4 & T5	8

Maximum

Maximum depth is determined by cable length.

Enclosures Type 1 & 3R/12

Tmax
MCCBs



T3E-1



T4E-3R12 ①

Enclosures (Price does not include circuit breaker; order as a separate item.) ④

NEMA designation	Breaker type	Enclosure maximum rating AL cables	CU cables	Approximate dimensions① H x W x D (inches)	Catalog number	List price
Type 1 ①	T1	100A	100A	15 x 8.5 x 4	T1E-1	\$ 267
	T2	100A	100A	15 x 8.5 x 4	T2E-1	267
	T3	175A	225A	20 x 11 x 4	T3E-1	315
	T4	200A	250A	26 x 15 x 6.25	T4E-1 ②	407
	T5	325A	400A	26 x 15 x 6.25	T5E-1 ②	435
Type 3R/12③	T1	100A	100A	15 x 8.5 x 7	T1E-3R12	407
	T2	100A	100A	15 x 8.5 x 7	T2E-3R12	407
	T3	175A	225A	20 x 11 x 7	T3E-3R12	527
	T4	200A	250A	26 x 15 x 9	T4E-3R12	625
	T5	325A	400A	26 x 15 x 9	T5E-3R12	767

Neutral kits

Breaker type	Neutral cable capacity and wire range	Neutral kit catalog number	List price
T1 – T2	Neutral #14-1/0 Bonding Lug #14-1/0	T2NK125	\$ 140
T3	Neutral #6-250 kcmil Bonding Lug #14-1/0	T3NK225	150
T4	Neutral #6-250 kcmil Bonding Lug #14-1/0 kcmil	T4NK250	200
T5	Neutral (2) #6-250 kcmil Bonding Lug #14-1/0 kcmil	T5NK400	295

NOTE: The list price adder for factory installation of an enclosed circuit breaker is 50% of the enclosure list price.

15

Description

Type 1

- General purpose indoor enclosure intended for use in normal environments to provide a degree of protection against contact with enclosed equipment.
- Sheet steel, surface mount.
- Breaker is front-operable and can be padlocked via a separately ordered padlock device.
- Available through 400A, 600VAC
- (SUSE) suitable for use as service equipment.

Type 3R/12

- Type 3R is intended for outdoor use providing protection against rain, sleet or snow.
- Type 12 is for use in indoor atmospheres to provide a degree of protection against circulating dust, lint, sawdust, falling dirt and dripping non-corrosive liquids.
- Surface-mounted, sheet steel enclosure.
- Breaker can be operated via **separately ordered** handle mechanism; door is interlocked with mechanism.
- Available through 400A, 600VAC.
- (SUSE) suitable for use as service equipment.

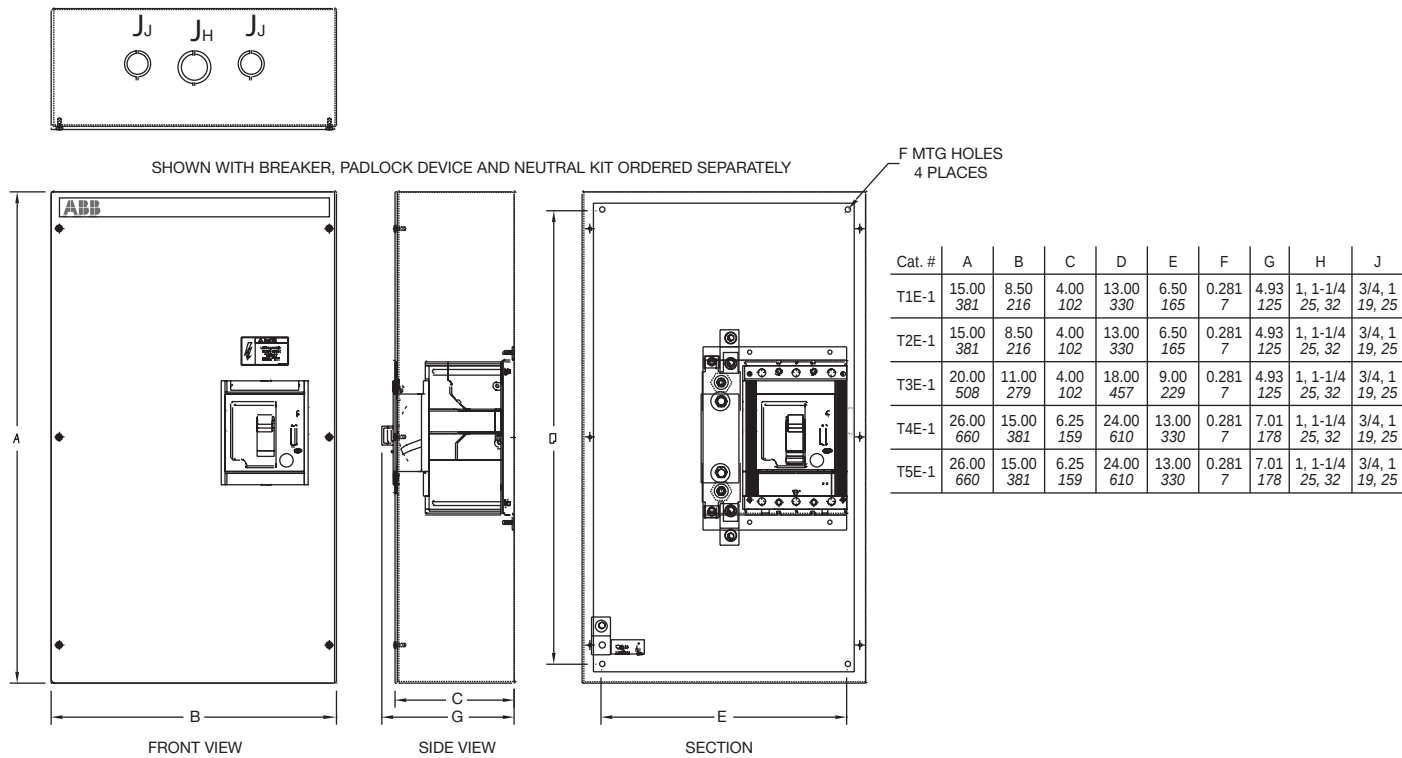
① Padlocking provision must be ordered separately.
 ② Must order KT5FLD (padlock device) separately.
 ③ Variable depth rotary handle must be ordered separately.
 ④ Consult ABB for breakers installed in enclosures.



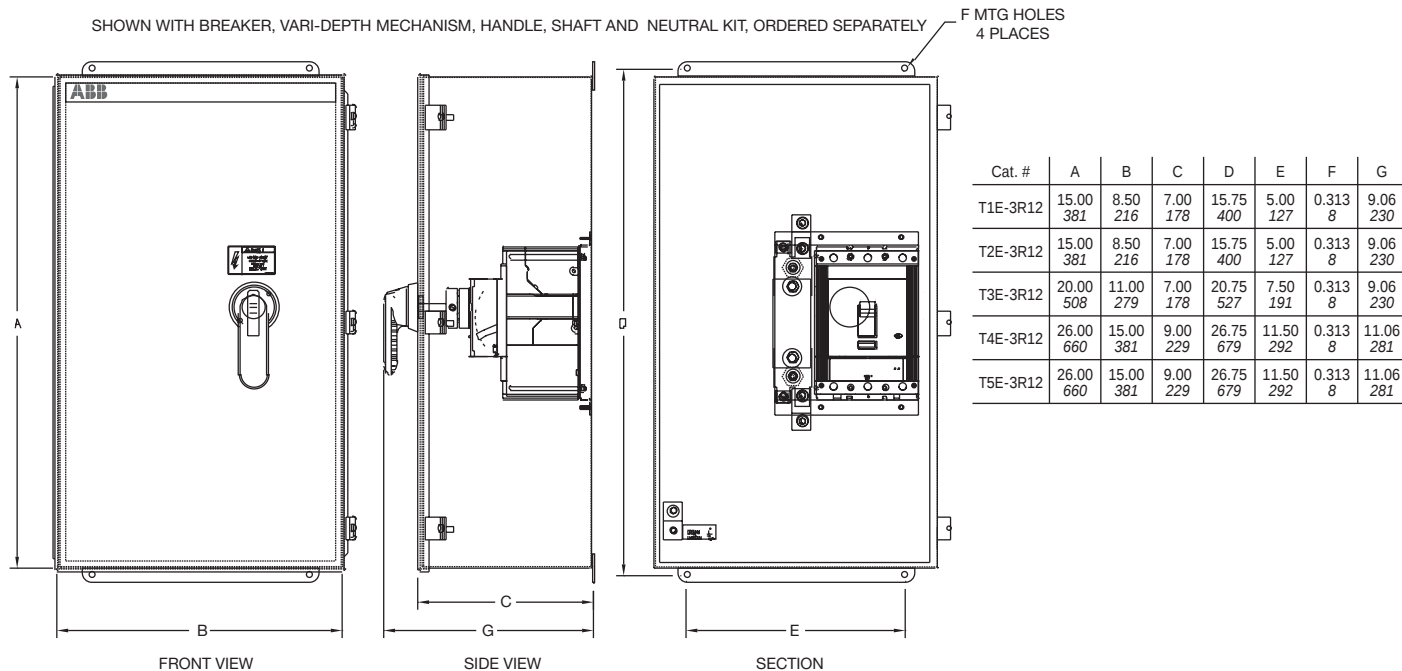
Enclosures

Approximate dimensions, T1 – T5
NEMA 1, 3R & 12

NEMA 1



NEMA 3R, 12

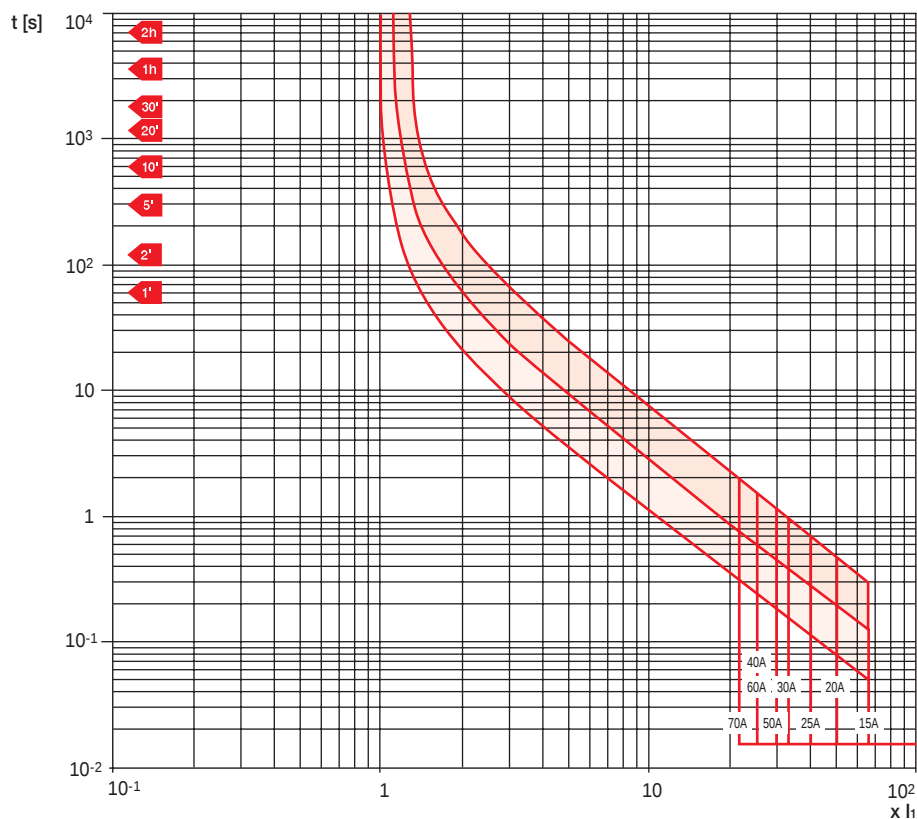


Trip curves for distribution Circuit breakers w/thermagnetic trip units Tmax T1



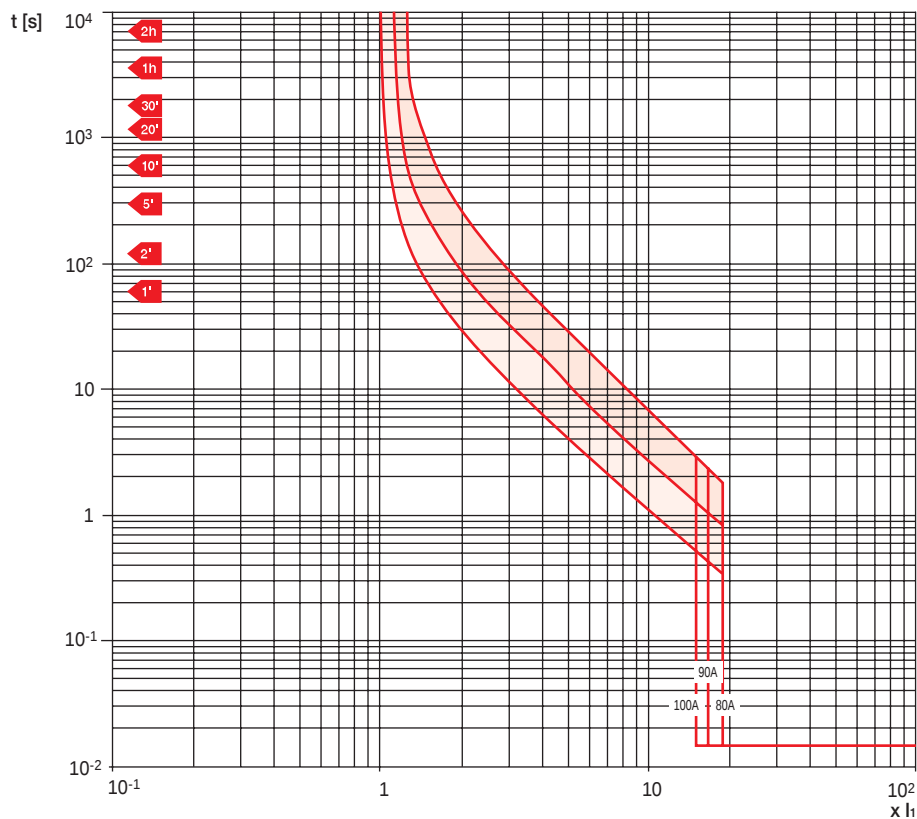
T1 100-T1 100 1P TMF

$I_n = 15 \div 70 \text{ A}$



T1 100-T1 100 1P TMF

$I_n = 80 \div 100 \text{ A}$



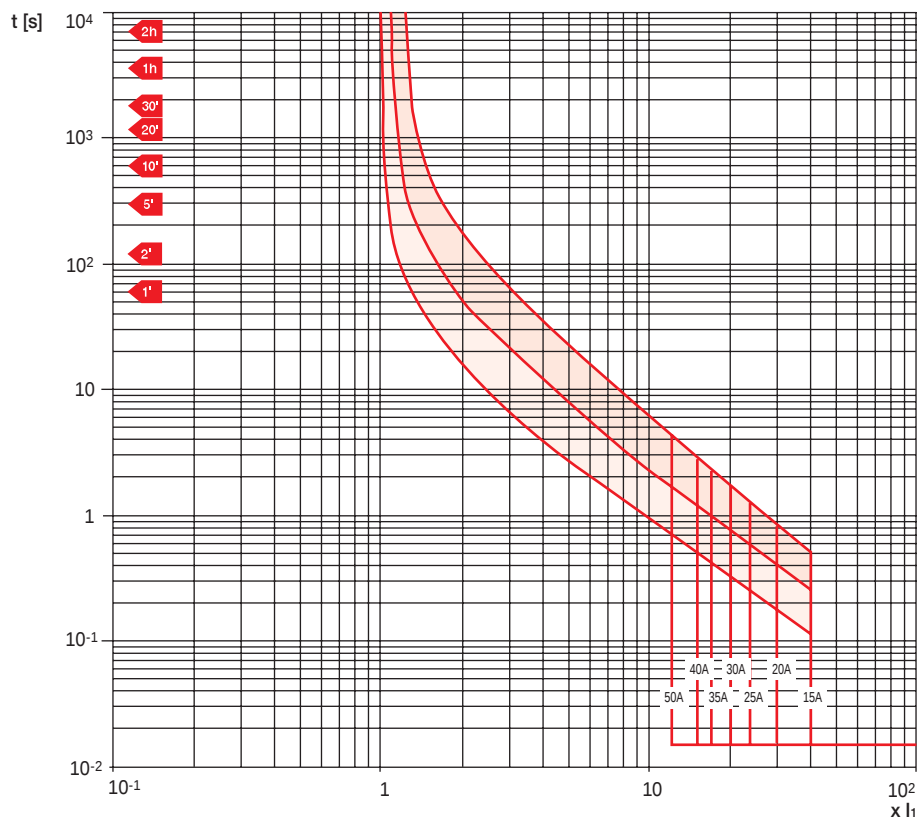


Trip curves for distribution

Circuit breakers w/thermagnetic trip units
Tmax T2

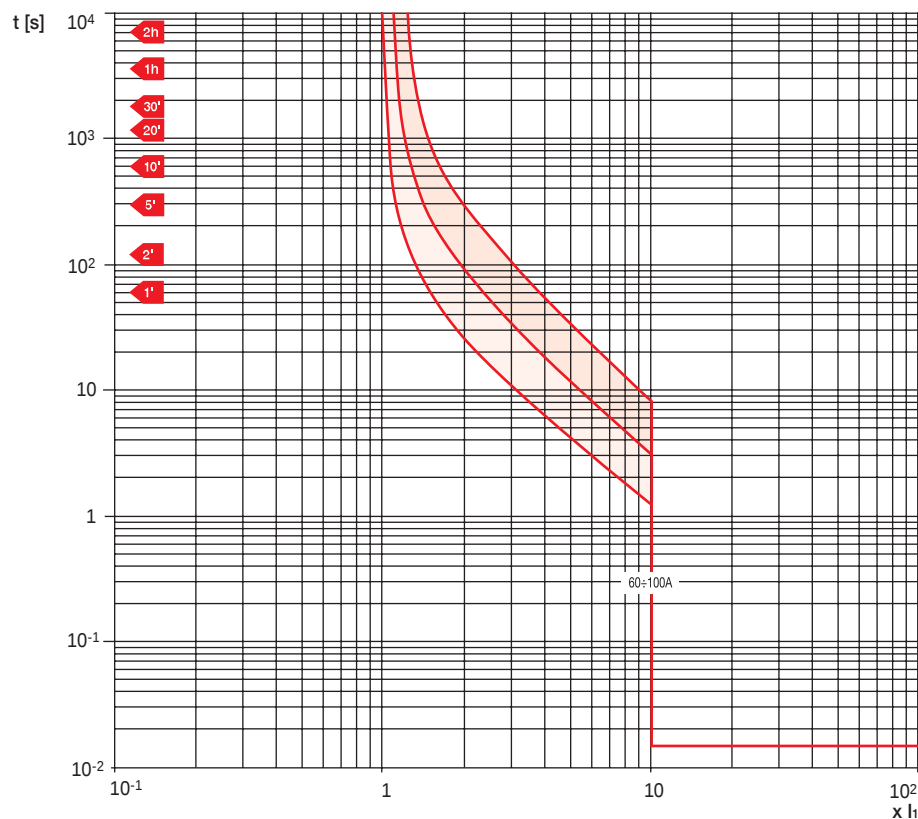
T2 100 TMF

$I_n = 15 \div 50 \text{ A}$



T2 100 TMF

$I_n = 60 \div 100 \text{ A}$



Trip curves for distribution

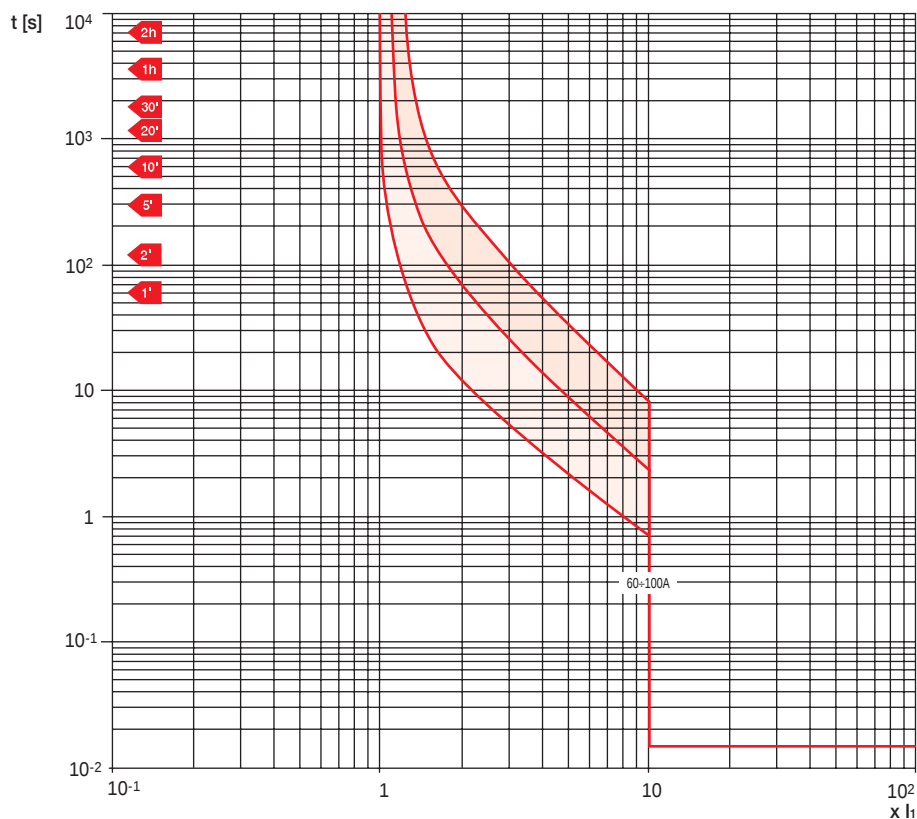
Circuit breakers w/thermagnetic trip units

Tmax T3



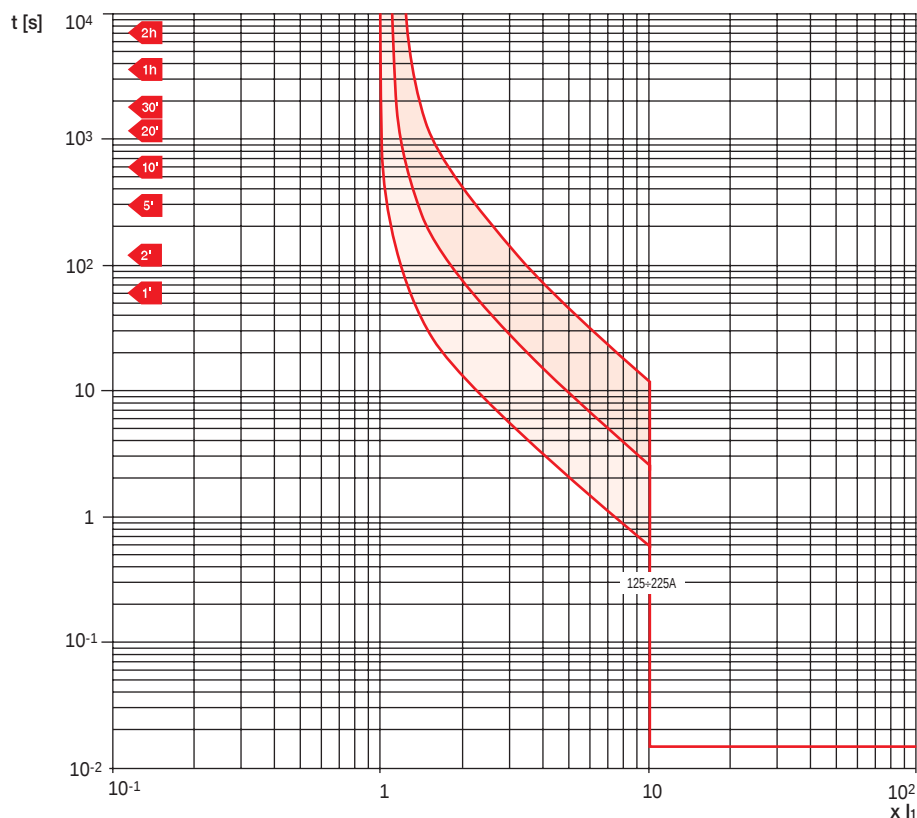
T3 225 TMF

$I_n = 60 \div 100 \text{ A}$



T3 225 TMF

$I_n = 125 \div 225 \text{ A}$





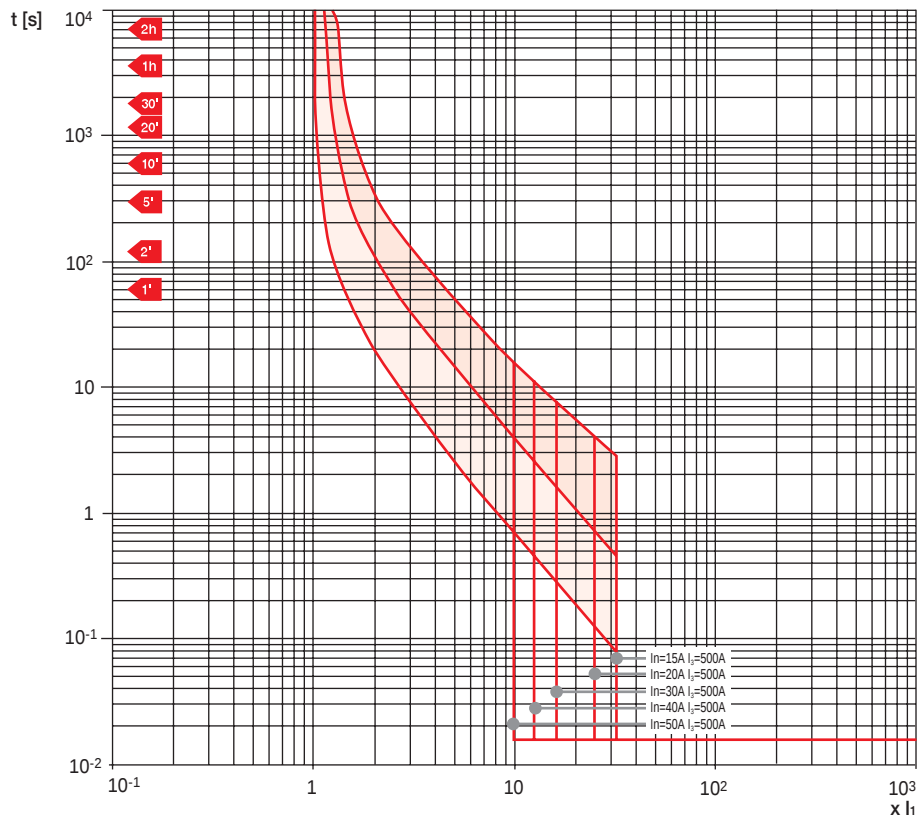
Trip curves for distribution

Circuit breakers w/thermagnetic trip units

Tmax T4

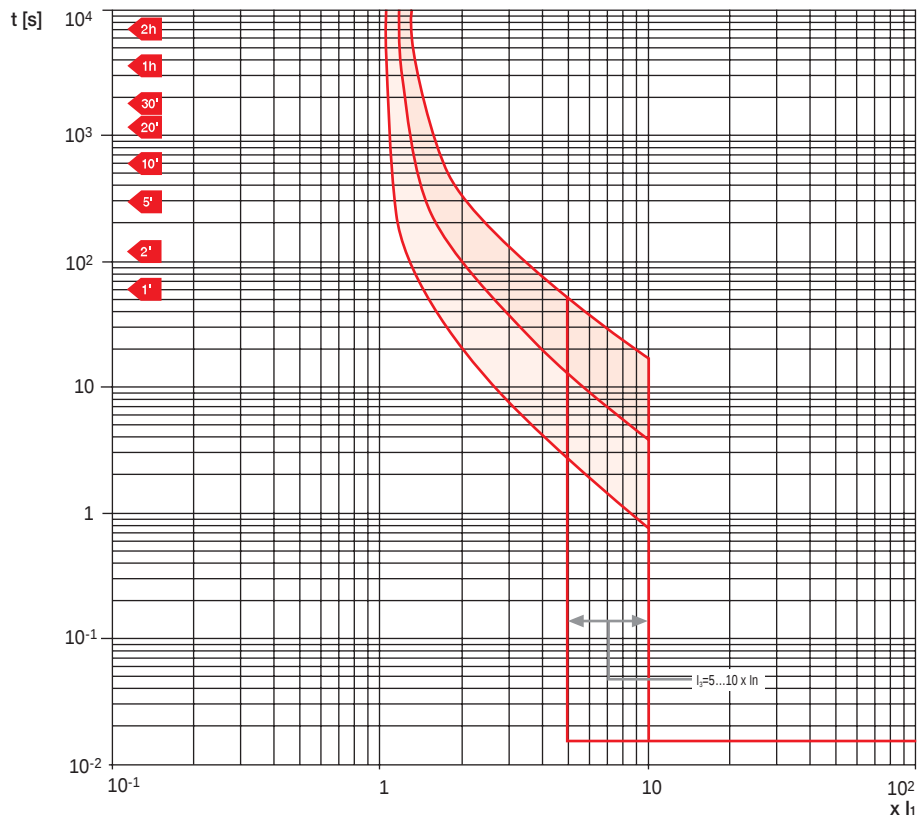
T4 250 TMF/TMD

$I_n = 20 \div 50$ A
 $I_n = 15, 20$ TMF
 $I_n = 30, 40, 50$ TMD



T4 250 TMA

$I_n = 80 \div 250$ A



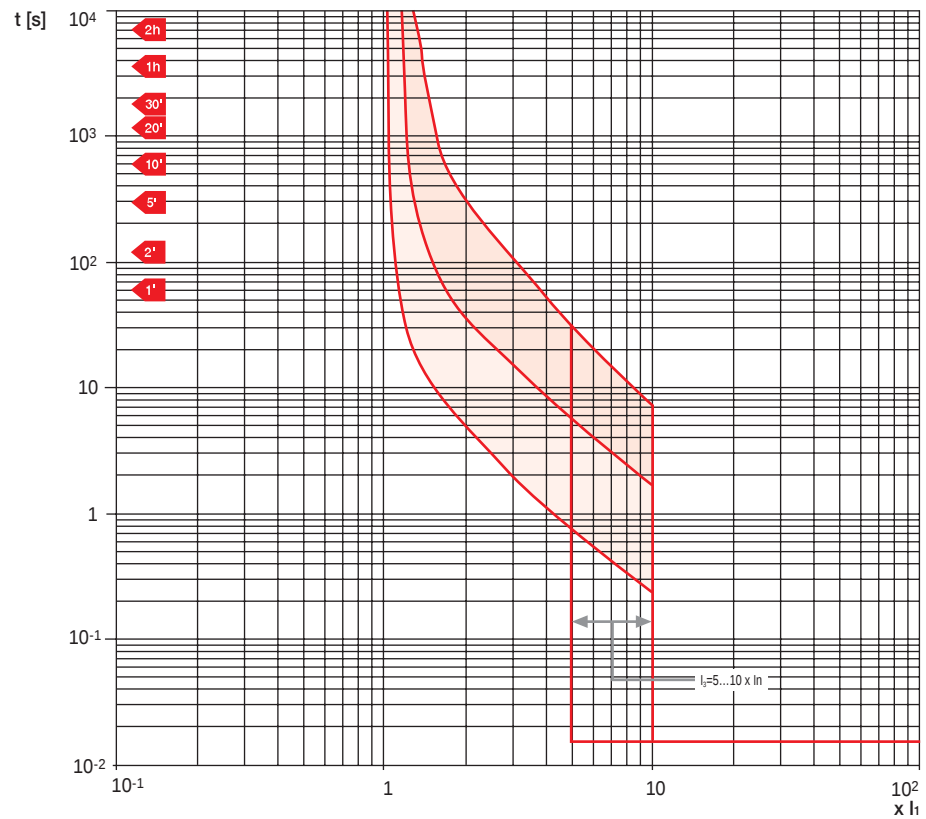
Trip curves for distribution

Circuit breakers w/thermagnetic trip units
Tmax T5



T5 400 TMA

$I_n = 300 \div 400 \text{ A}$





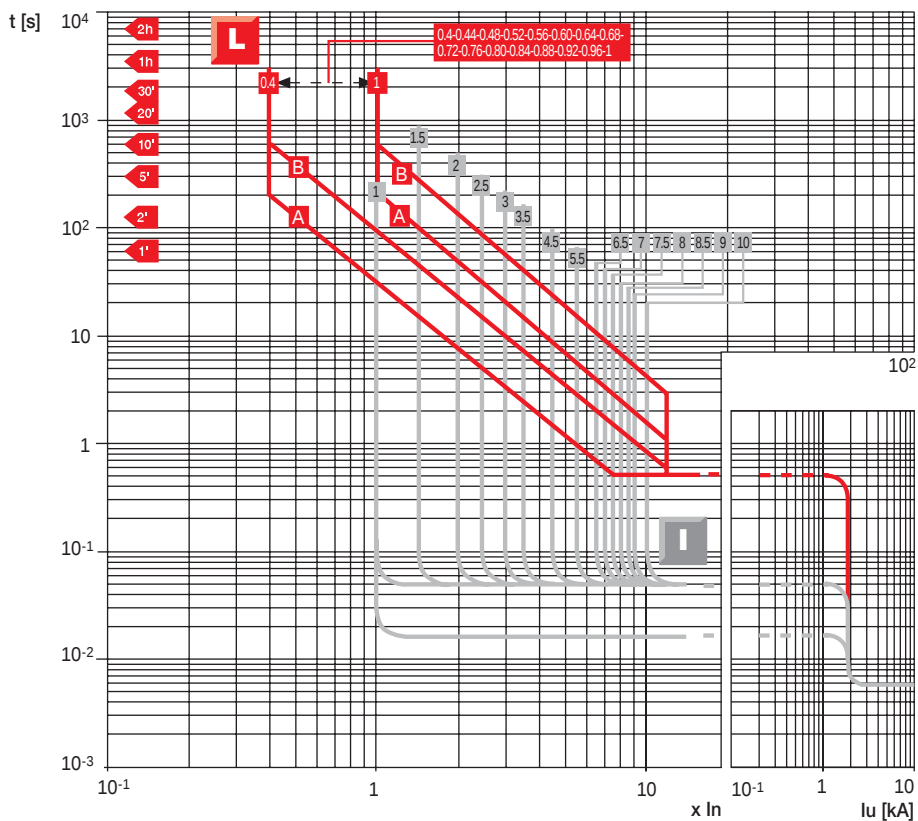
Trip curves for distribution

Circuit breakers w/electronic trip units

Tmax T2

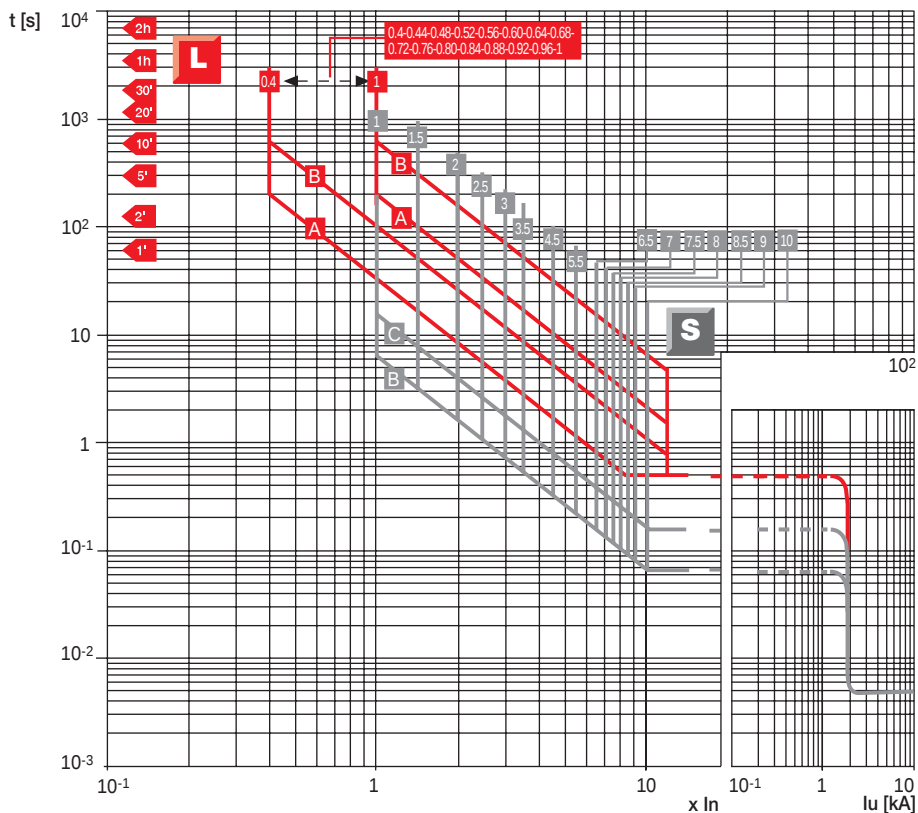
T2 100
PR221DS-LS

L-I Functions



T2 100
PR221DS-LS

L-I Functions

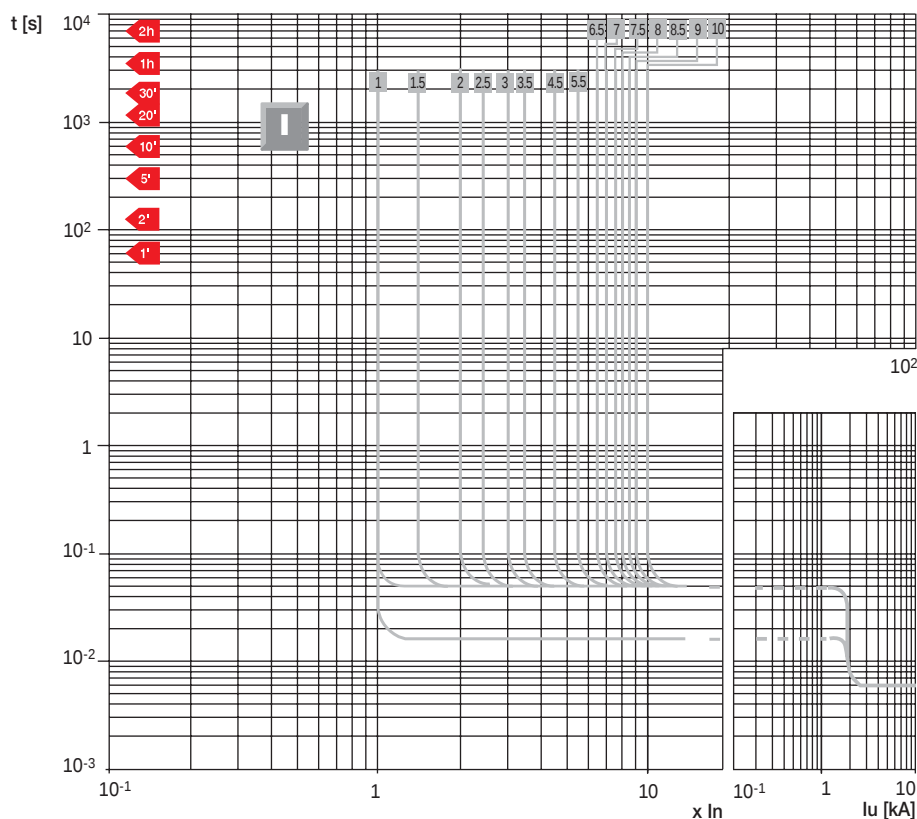


Trip curves for distribution Circuit breakers w/electronic trip units Tmax T2, T4 & T5

Tmax
MCCBs

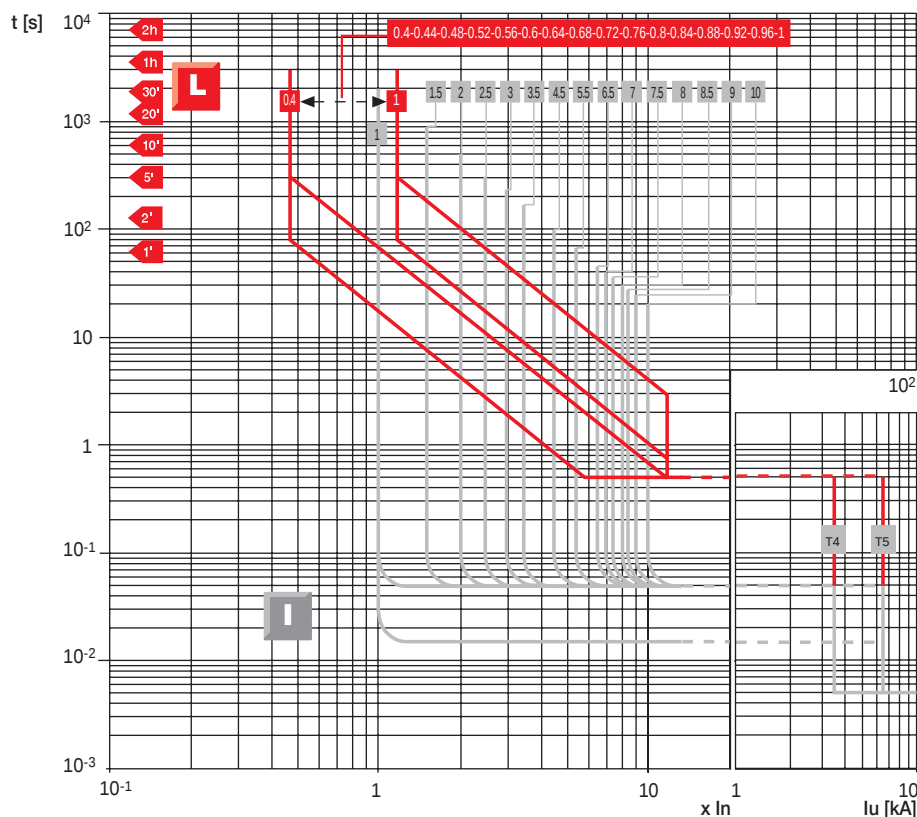
T2 100 PR221DS-I

I Function



T4 250 - T5 600 PR221DS

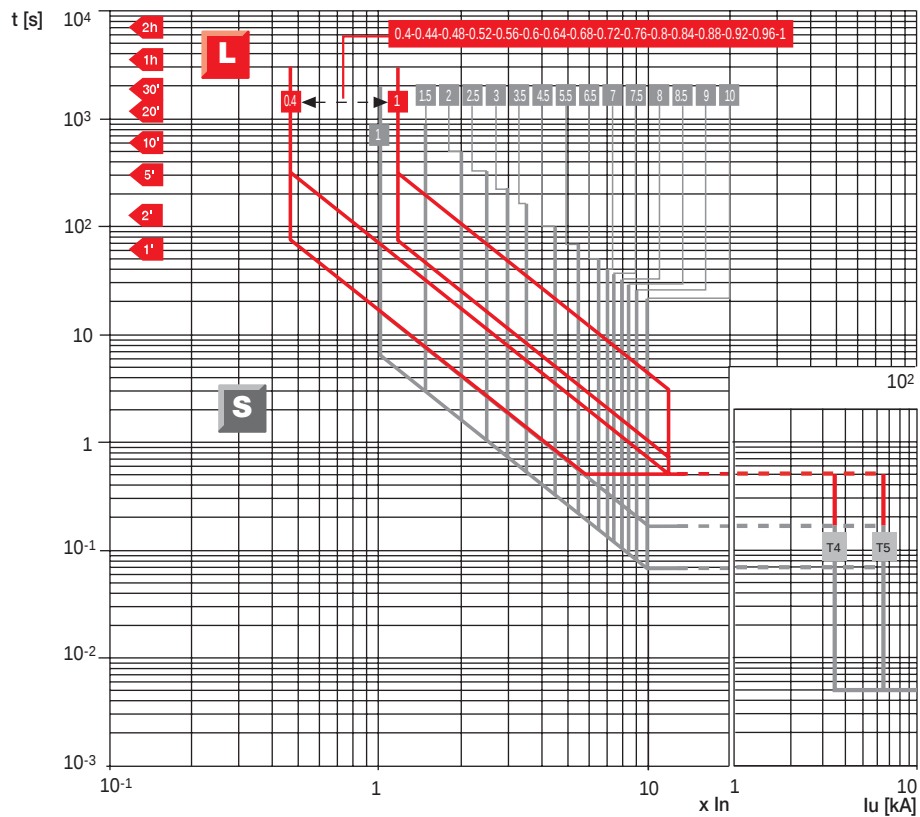
L-I Functions



Trip curves for distribution

**T4 250 - T5 600
PR221DS**

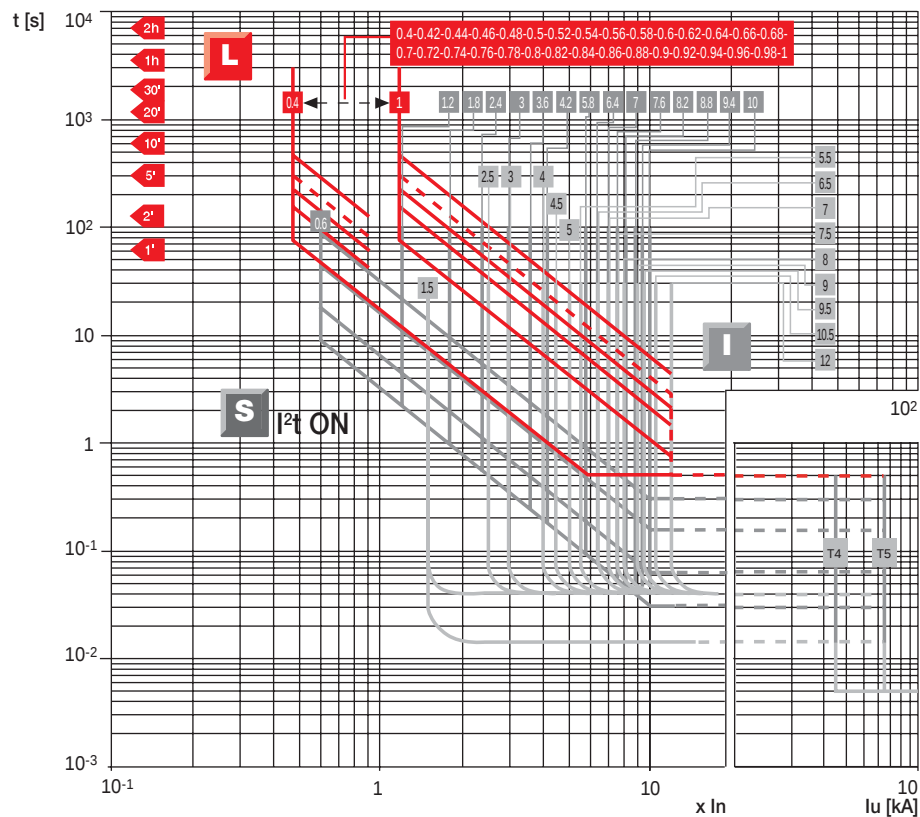
L-S Functions



**T4 250 - T5 600
PR222DS/P and
PR222DS/PD**

15

L-S-I Functions



**Tmax
MCCBs**



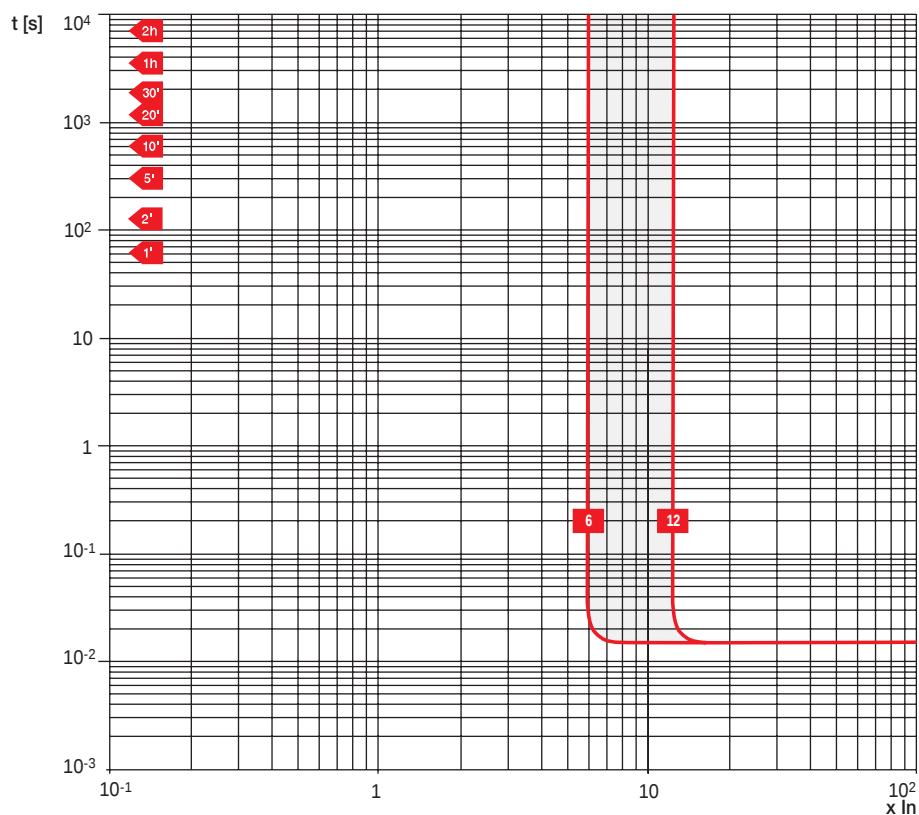
Trip curves for MCP

Circuit breakers w/magnetic only trip units
Tmax T2 & T3

T2-T3 100 MCP

Adjustable magnetic only trip unit

$I_3 = 6 \dots 12 \times I_n$



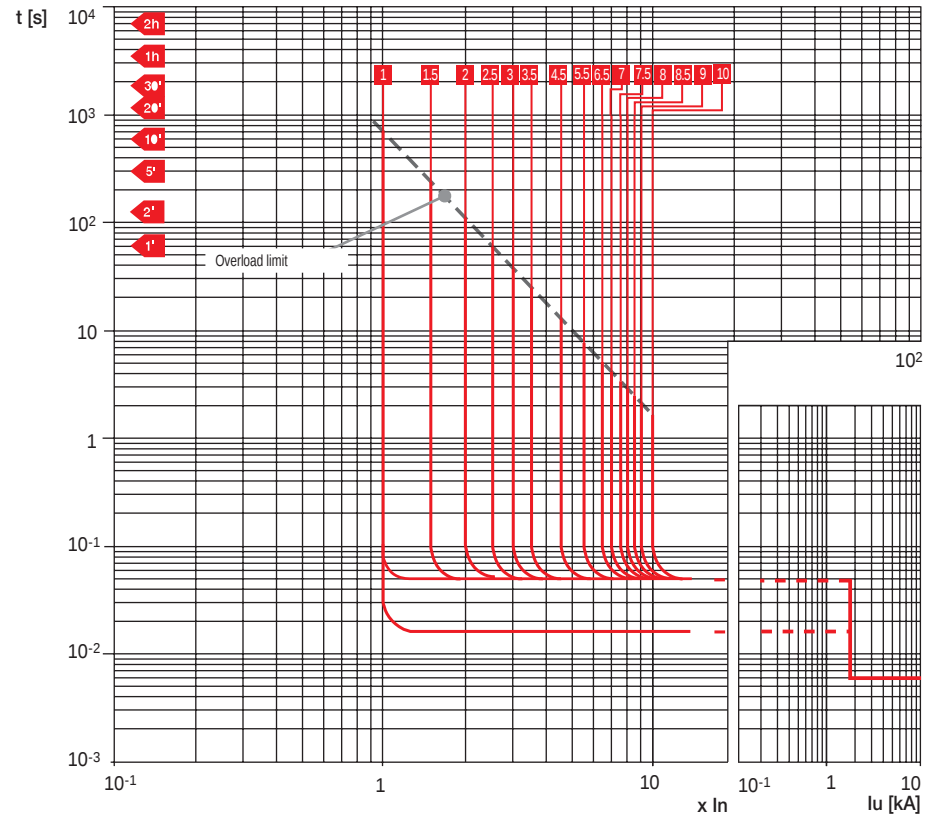
Trip curves for MCP

Circuit breakers w/PR221DS-I electronic trip unit
Tmax T2, T4 & T5

Tmax
MCCBs

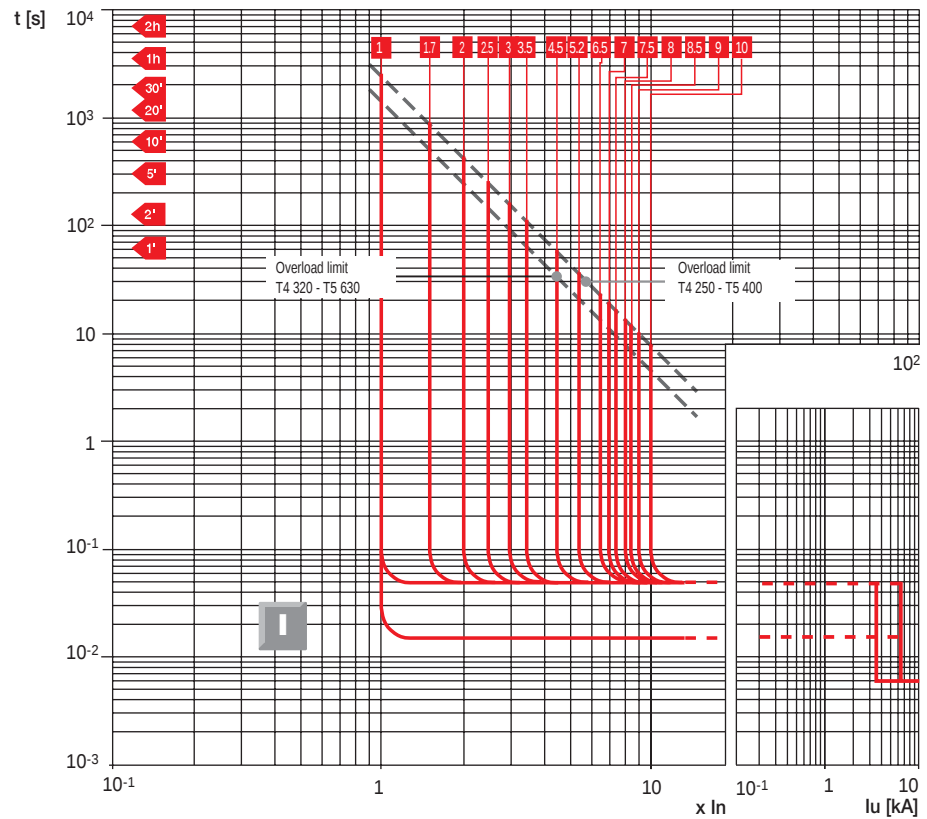
T2 100 PR221DS-I

I Function



T4 250 - T5 600 PR221DS-I

I Function



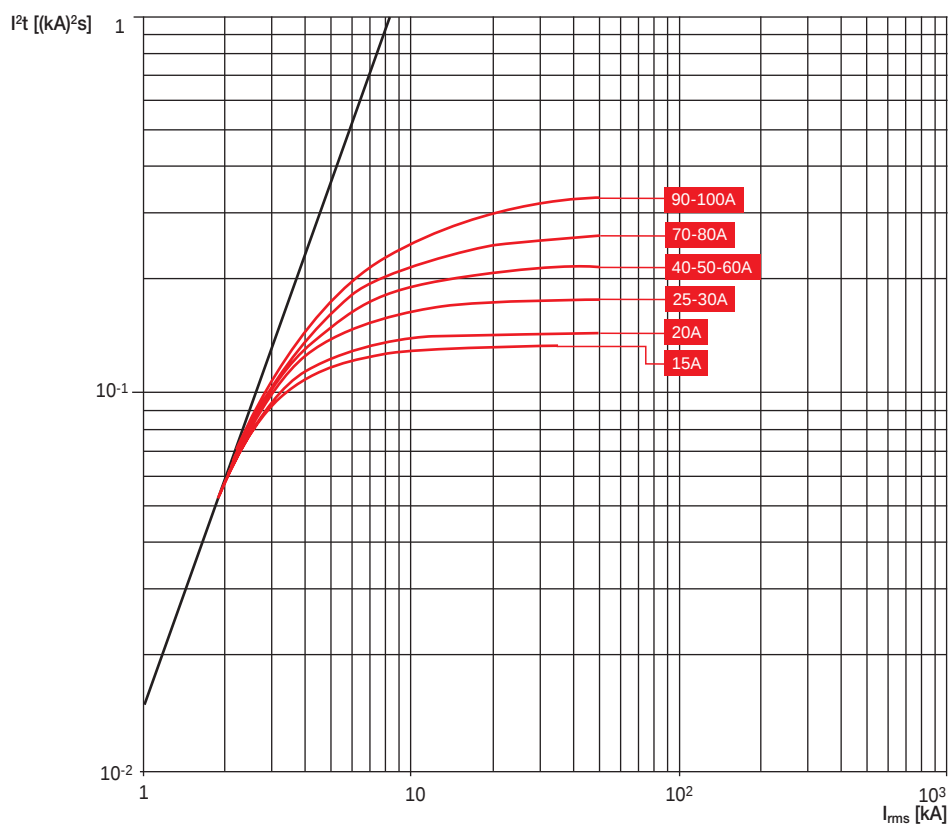


Specific let-through energy curves

Tmax T1 & T2, 240V

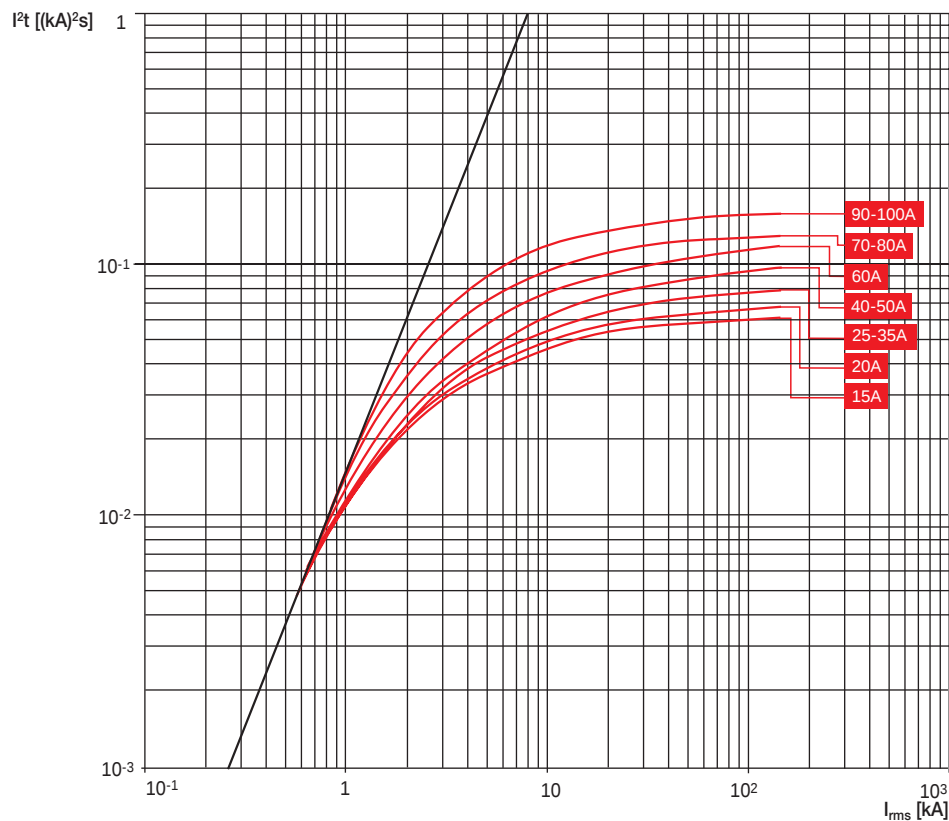
T1 100

240 V



T2 100

240 V



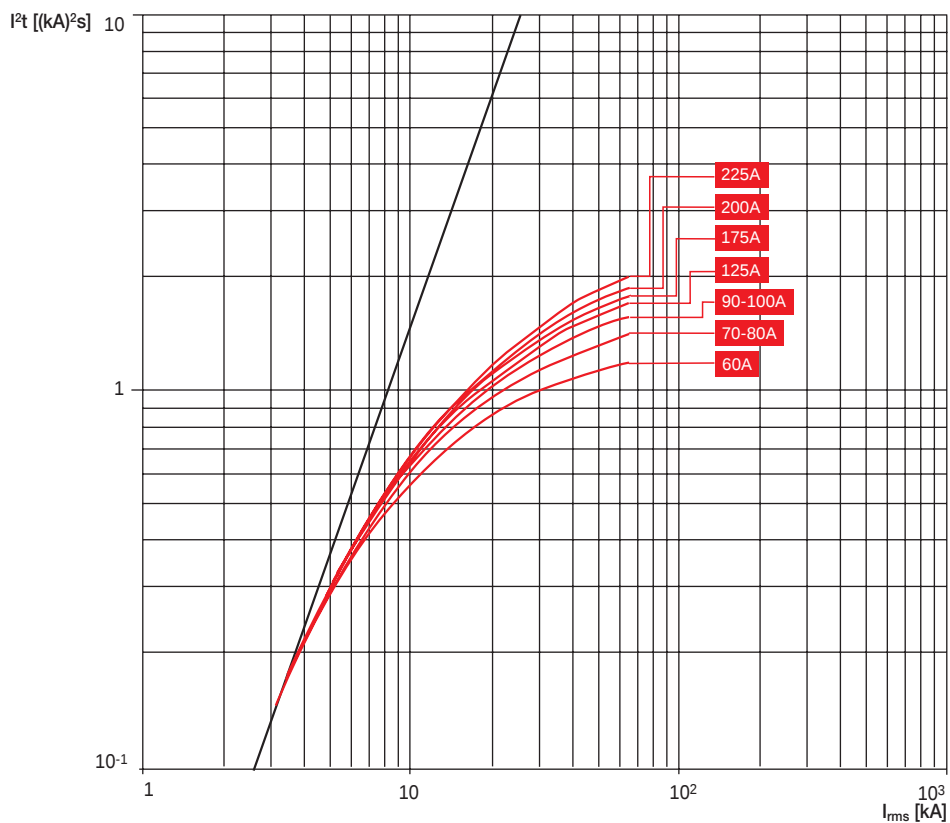
Specific let-through energy curves

Tmax T3 & T4, 240V



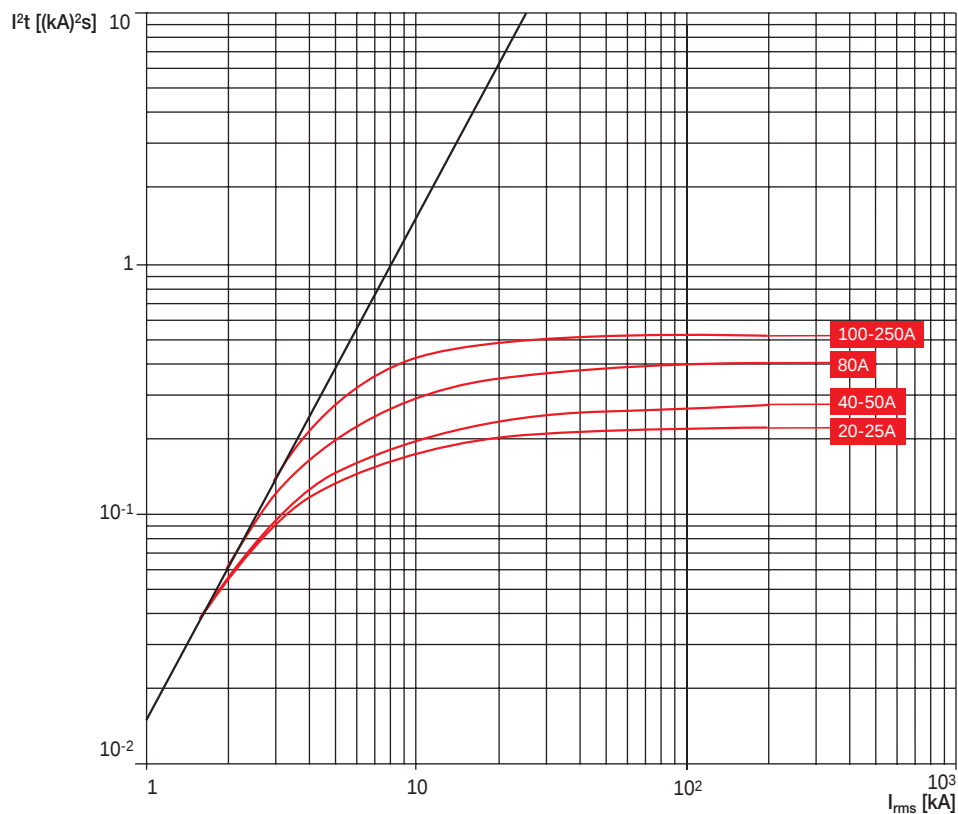
T3 225

240 V



T4 250

240 V





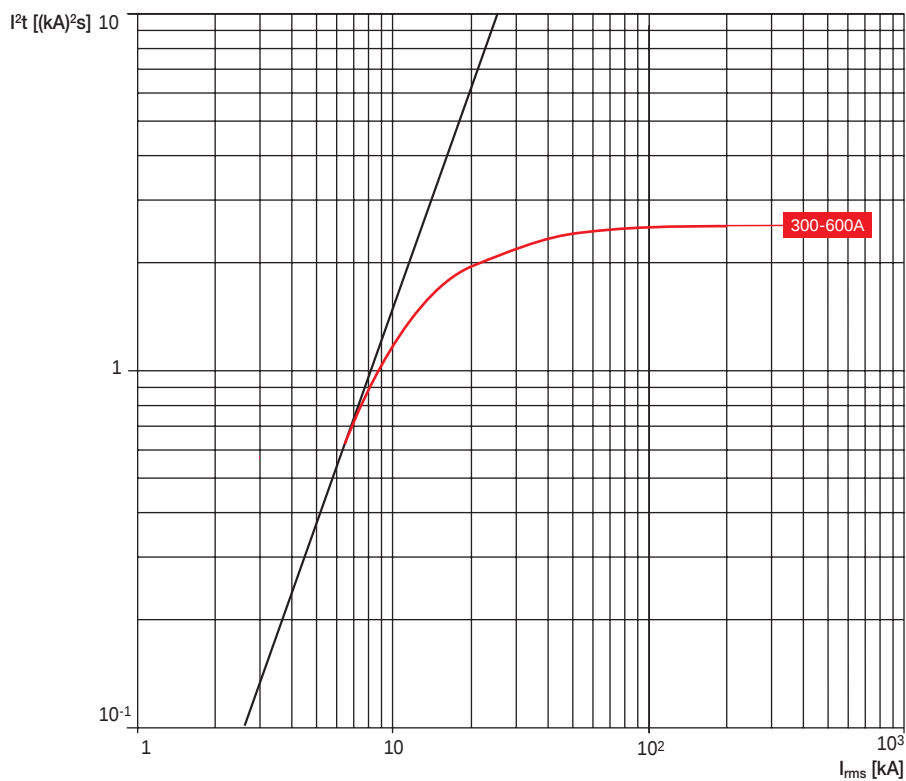
Specific let-through energy curves

Tmax T5, 240V

T5 600

240 V

* Please ad ABB for 600 A availability



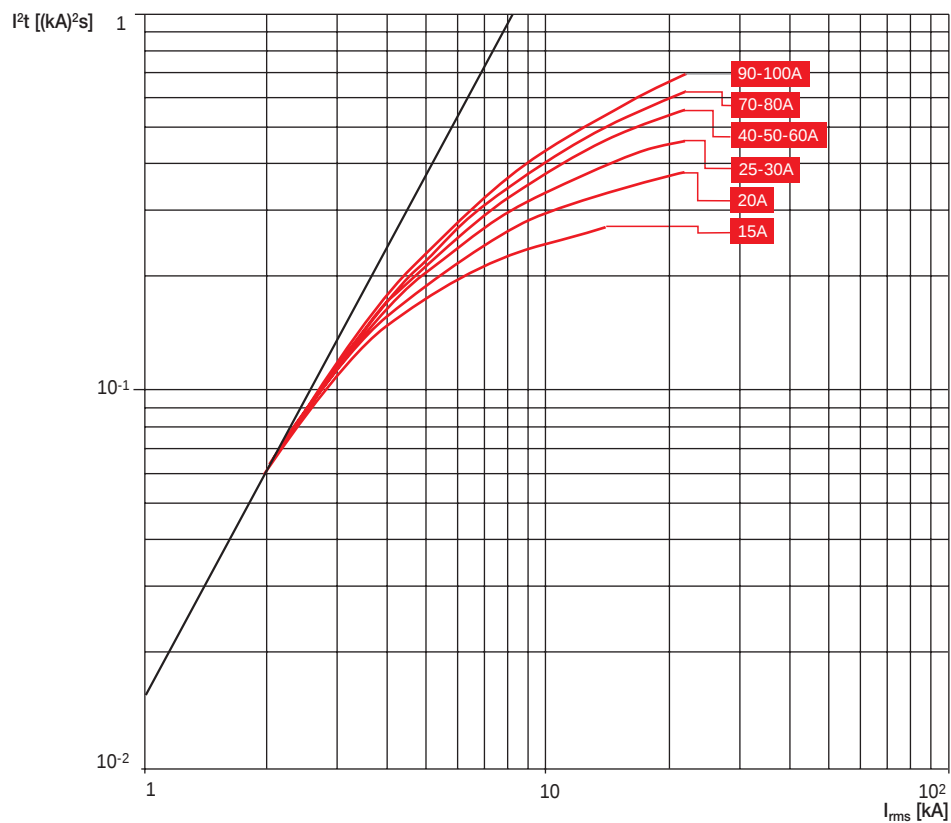
Specific let-through energy curves

Tmax T1 & T2, 480V



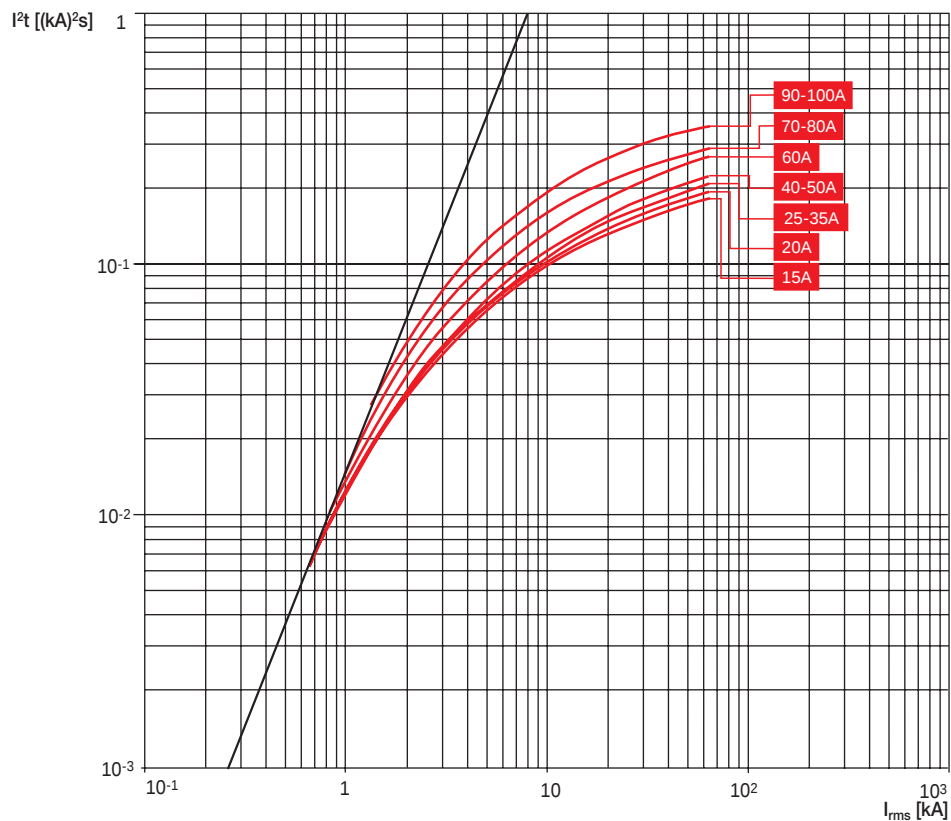
T1 100

480 V



T2 100

480 V



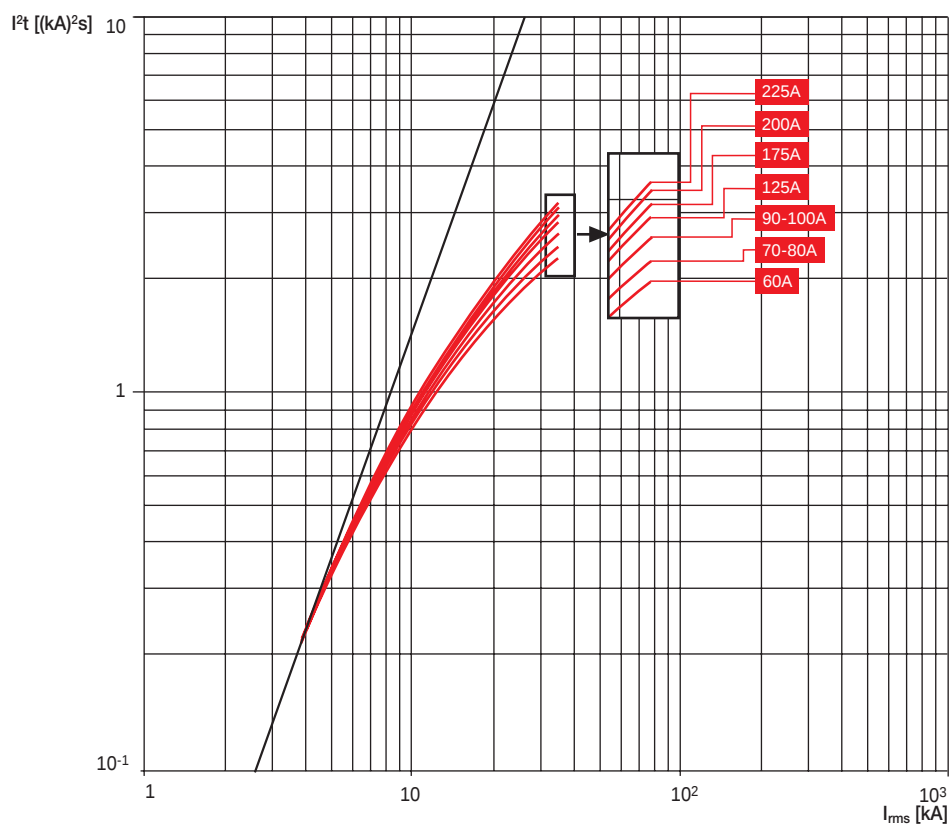


Specific let-through energy curves

Tmax T3 & T4, 480V

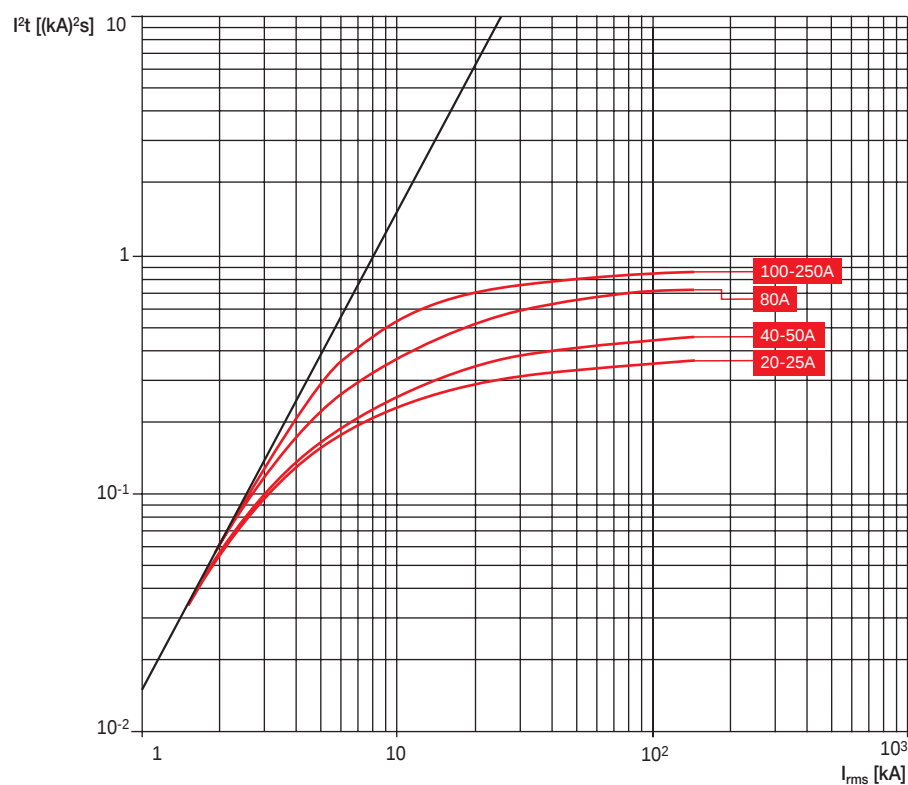
T3 225

480 V



T4 250

480 V



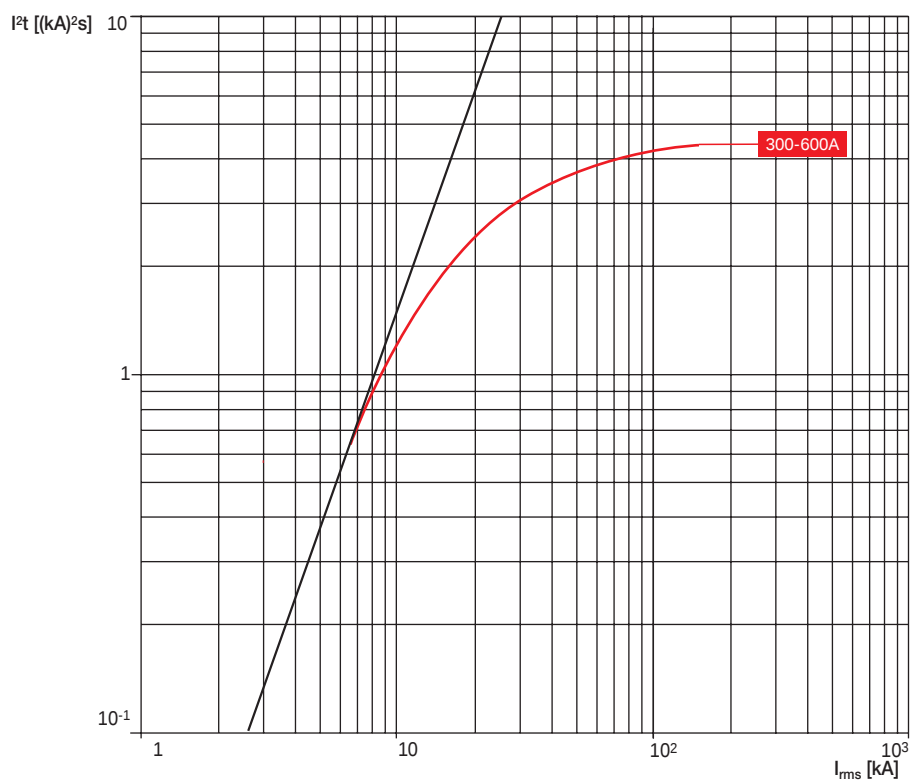
Specific let-through energy curves

Tmax T5, 480V



T5 600

480 V



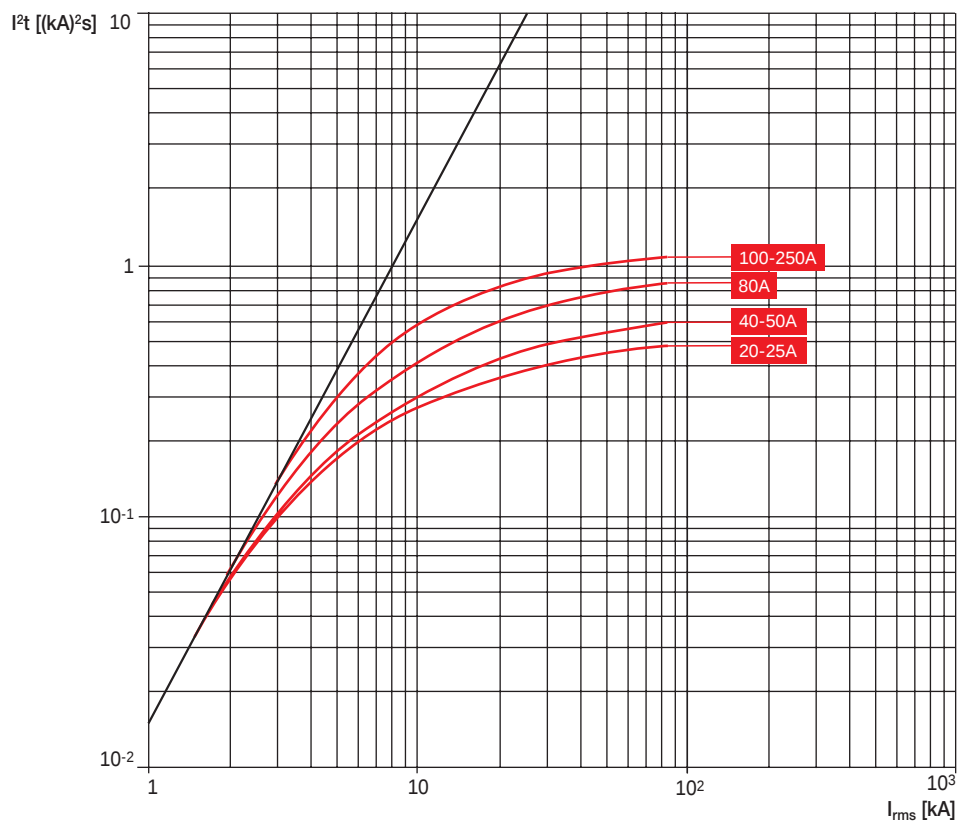


Specific let-through energy curves

Tmax T4 & T5, 600V

T4 250

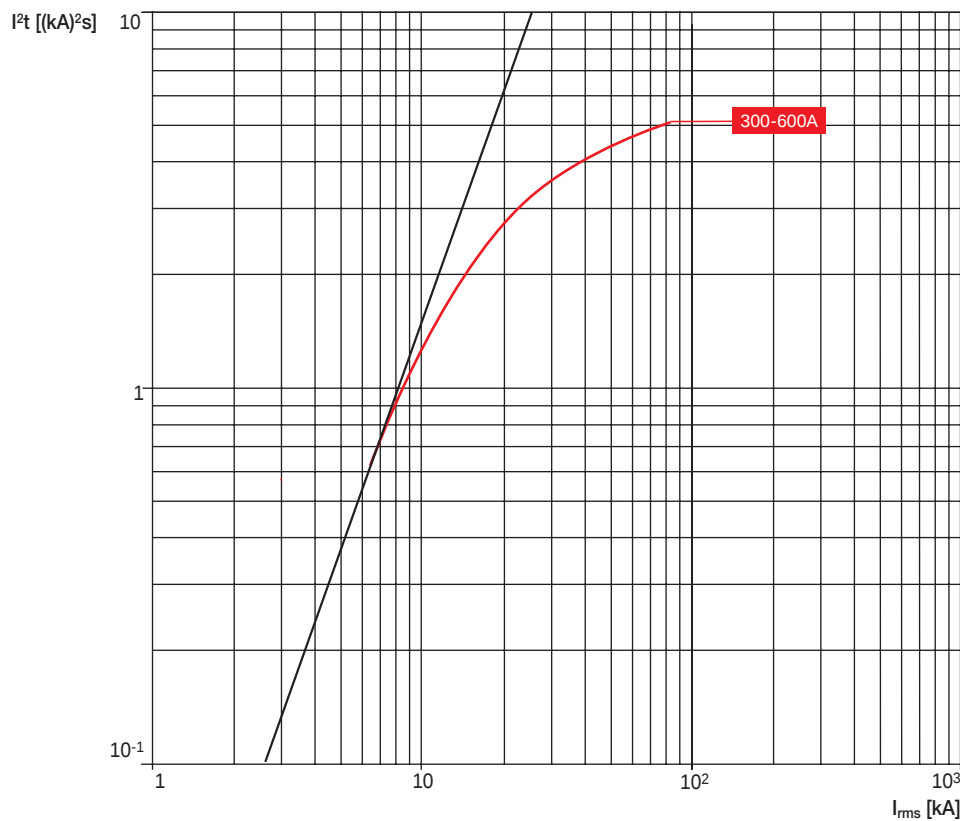
600 V



T5 600

600 V

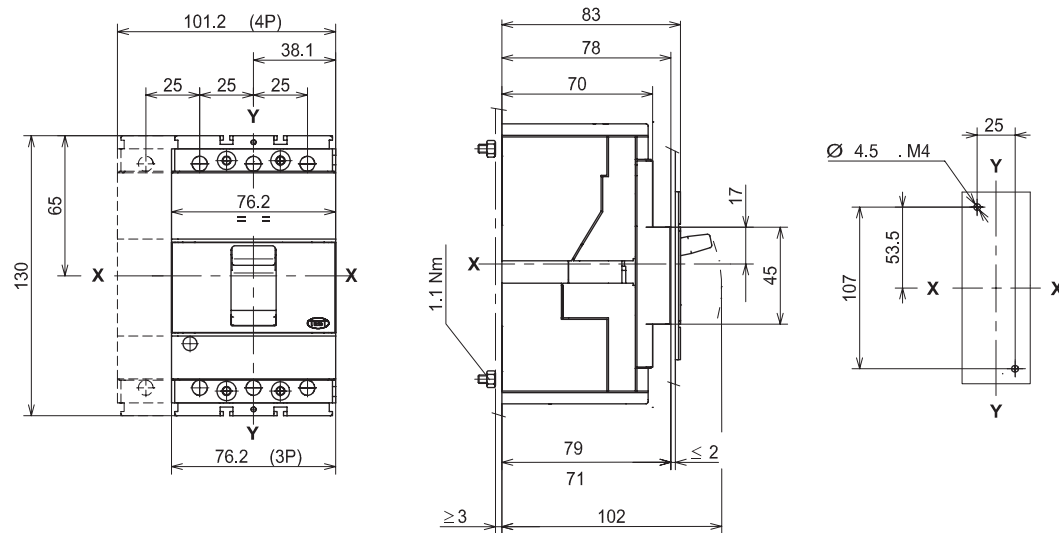
15



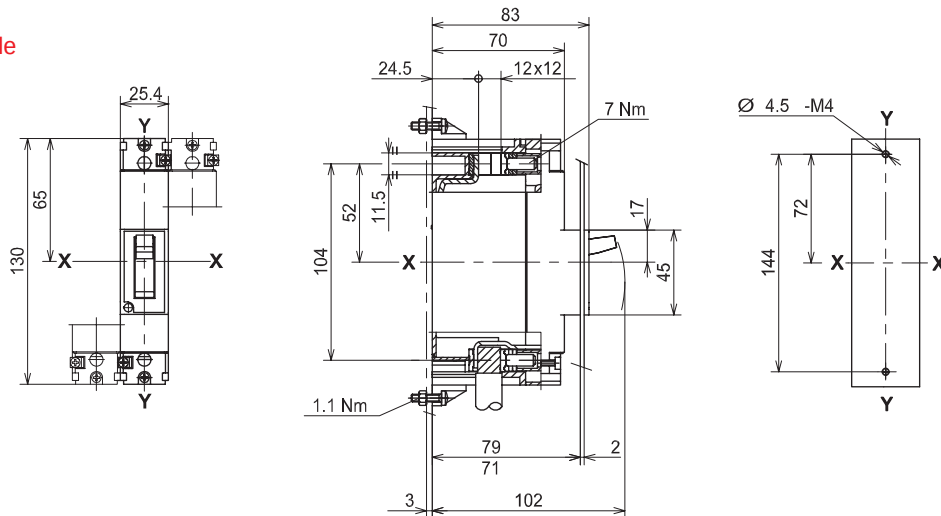
Approximate dimensions T1 & T2

Tmax
MCCBs

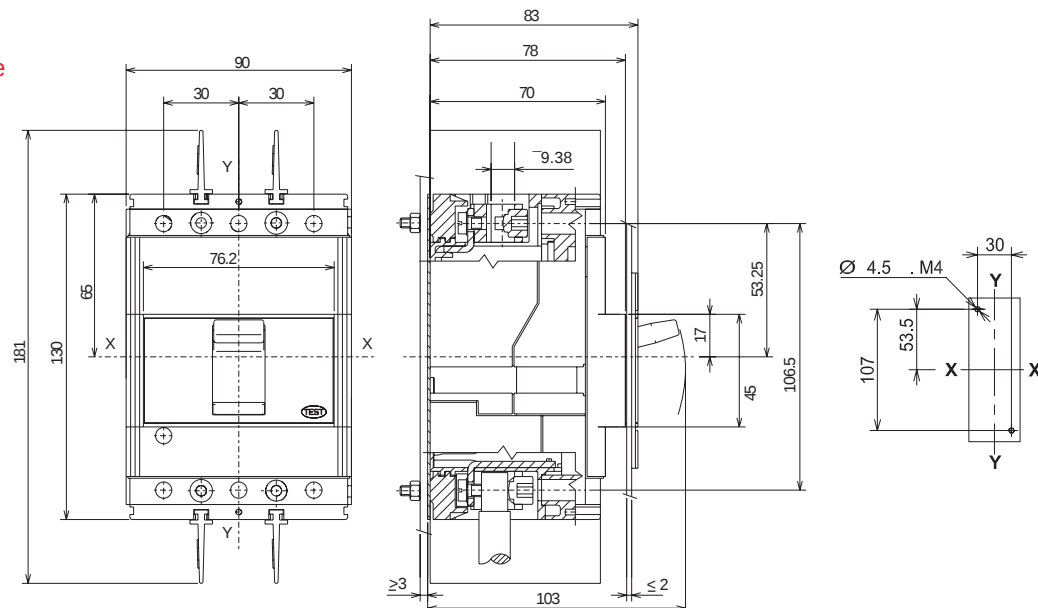
T1 — 3 pole



T1 — Single pole

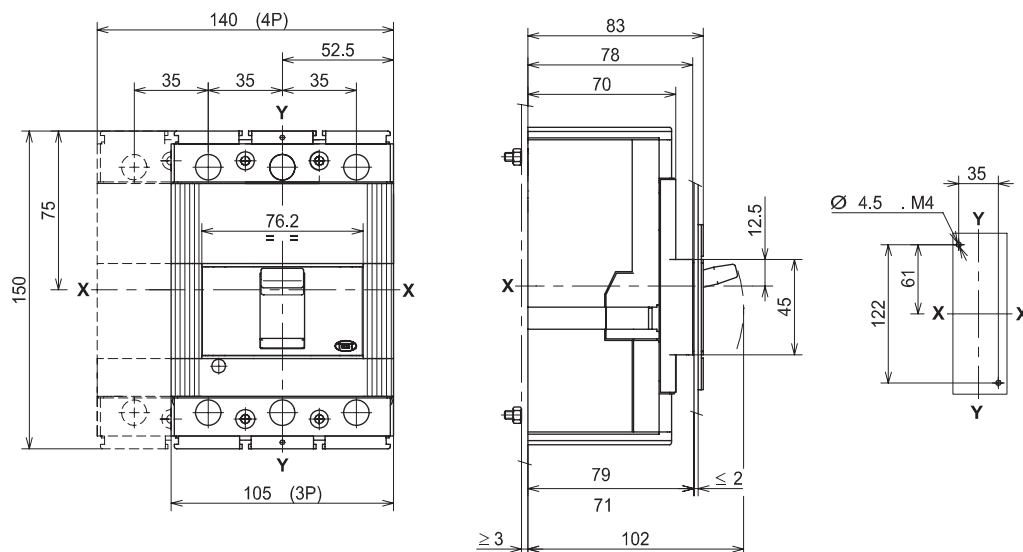


T2 — 2 & 3 pole

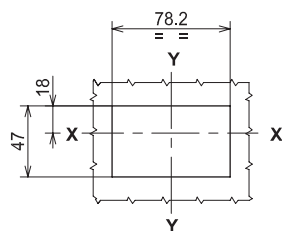


Approximate dimensions T3

T3 — 2 & 3 pole



Door cut-out for Tmax without faceplate



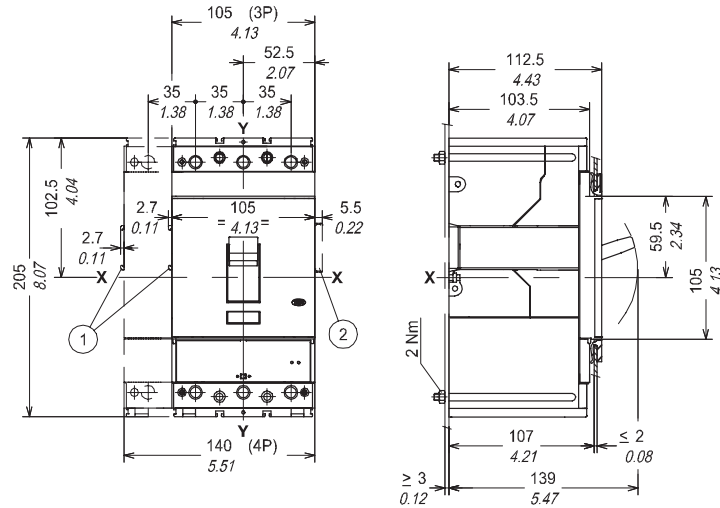
Approximate dimensions T4

Tmax
MCCBs

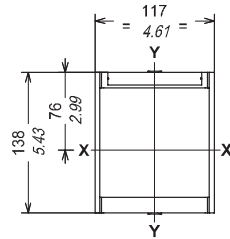
Fixed circuit breaker

Caption

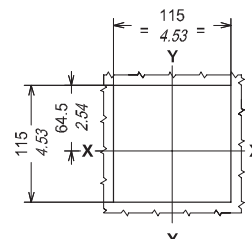
- ① Overall dimensions with cabled accessories mounted (SOR-C, UVR-C, RC221-222)
- ② Overall dimensions with cabled auxiliary contacts mounted (only 3Q 1SY)



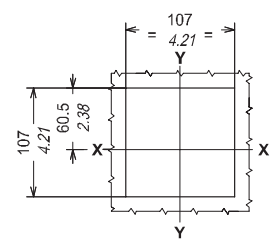
Flange for compartment door



Drilling templates of the compartment door



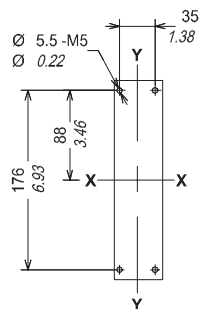
3-4 POLES
With flange



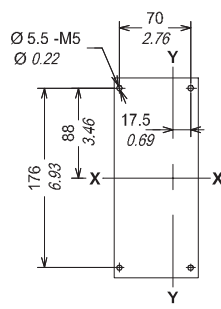
3-4 POLES
Without flange

Drilling templates for support sheet

For front terminals

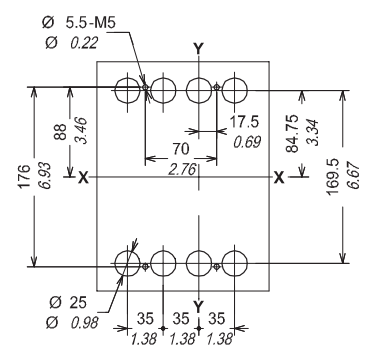
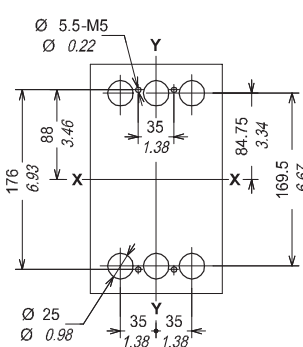


3 POLES



4 POLES

For rear terminals

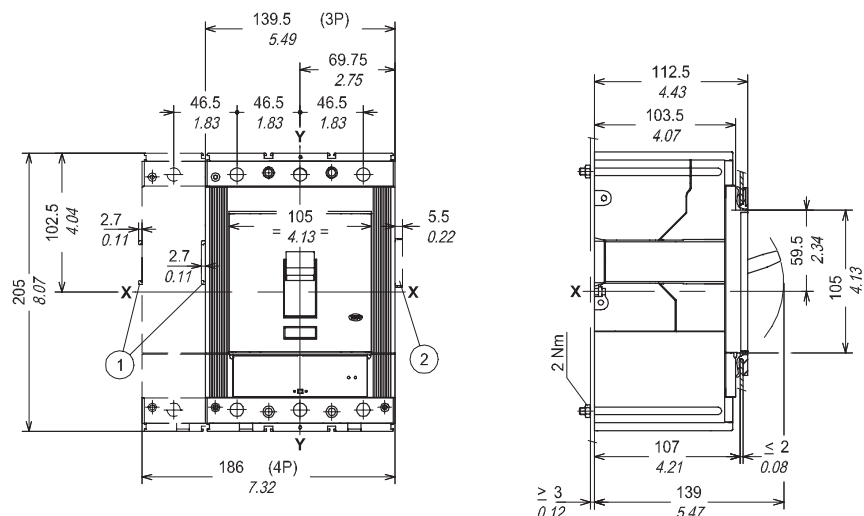


Fixed circuit breaker

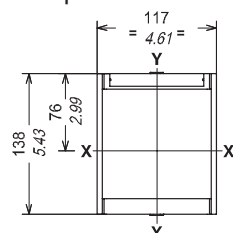
Fixing on sheet

Caption

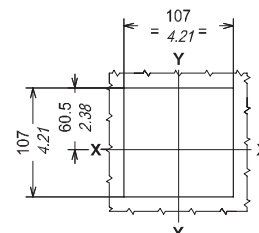
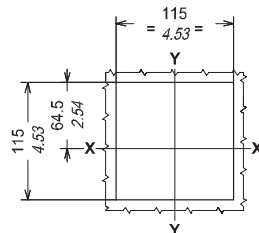
- ① Overall dimensions with cabled accessories mounted (SOR-C, UVR-C, RC221-222)
- ② Overall dimensions with cabled auxiliary contacts mounted (only 3Q 1SY)



Flange for
compartment door



Drilling templates of the compartment door

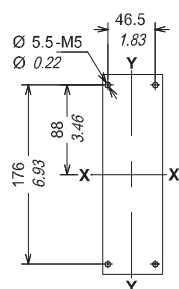


With flange (3-4 POLES)

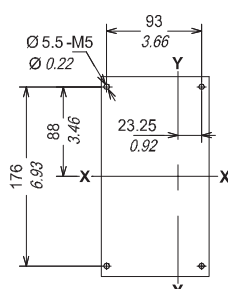
Without flange (3-4 POLES)

Drilling templates for support sheet

For front terminals

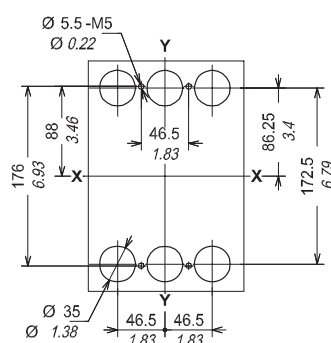


3 POLES

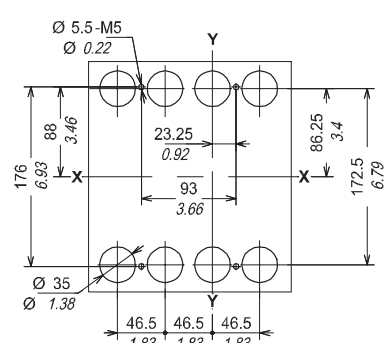


4 POLES

For rear terminals



3 POLES



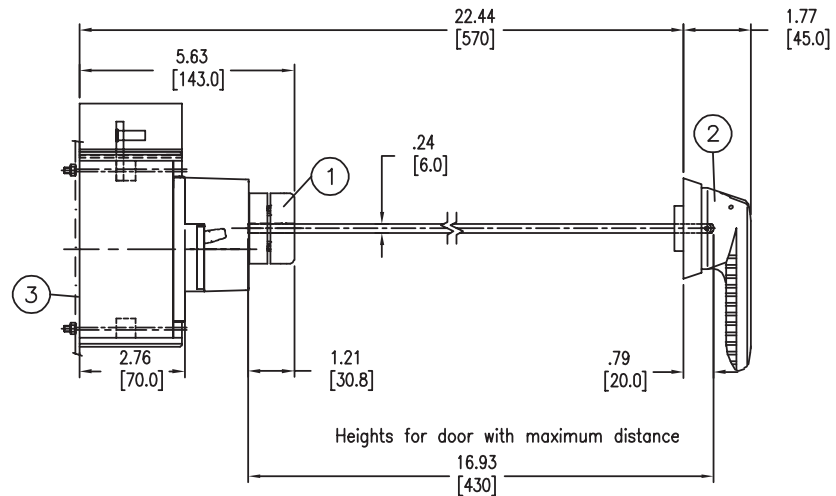
4 POLES

Approximate dimensions

T1 - T3 variable depth mechanism with OHB handle

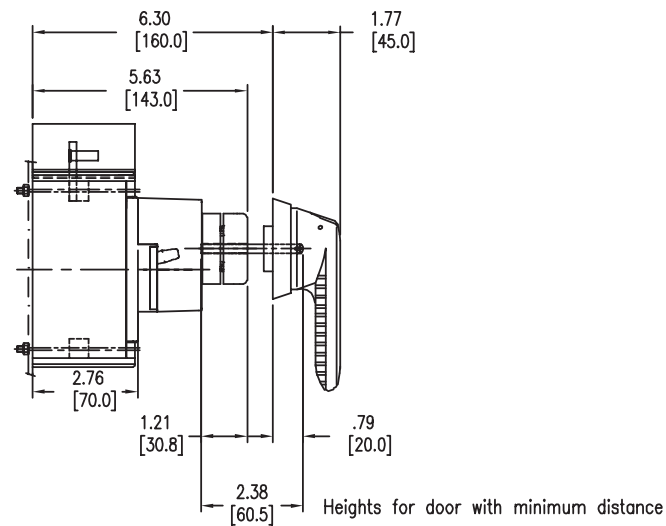
Tmax
MCCBs

Pistol handle operating mechanism on the compartment door

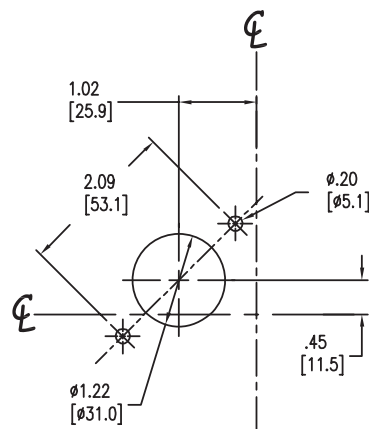


Caption

- ① Transmission unit
- ② Pistol handle operating mechanism on the compartment door
- ③ Insulating plate

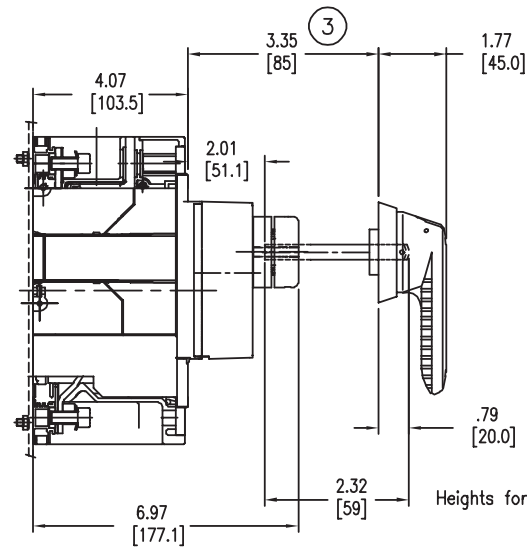
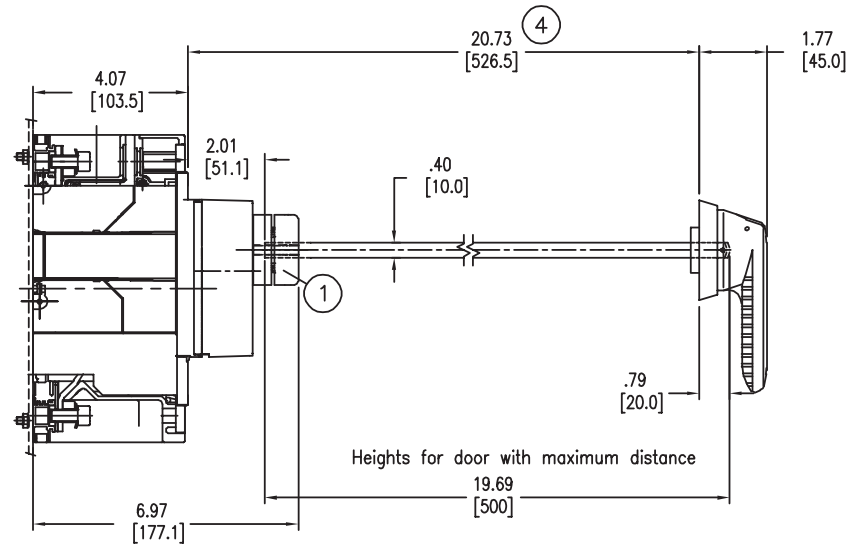


Drilling template of the compartment door



Approximate dimensions T4 - T5 variable depth mechanism with OHB handle

Pistol handle operating mechanism on the compartment door

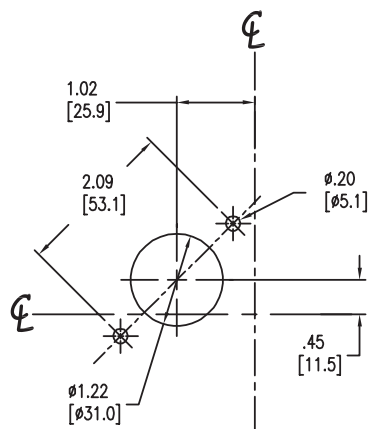


Note:
Minimum distance from hinge of
enclosure door to center of shaft
is 7.87 in. [200mm]

Caption

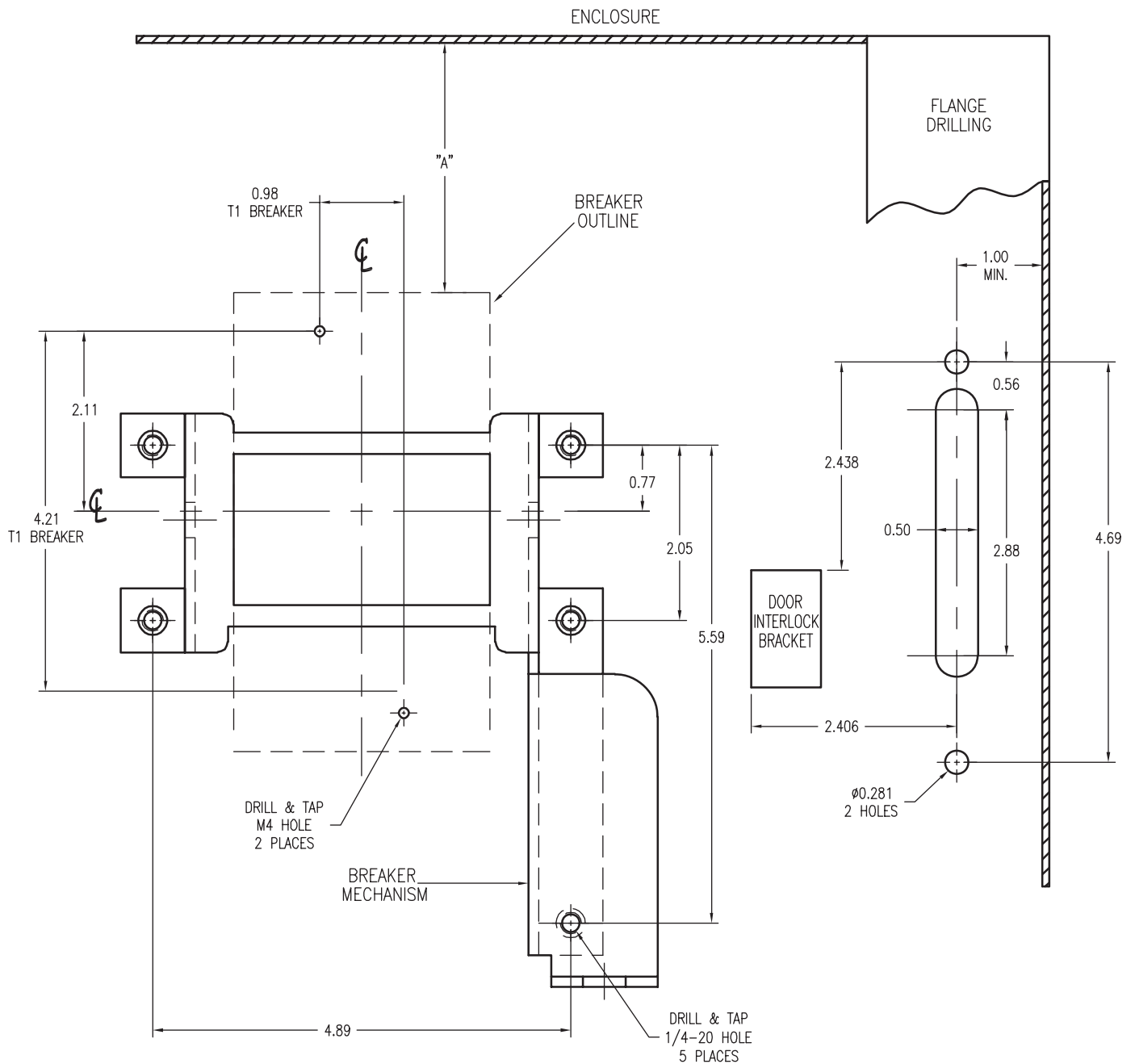
- ① Transmission unit
- ② Pistol handle operating mechanism on the compartment door
- ③ Minimum distance from the front door with accessory
- ④ Maximum distance from the front door with accessory

Drilling template of the compartment door



Approximate dimensions T1 Flange handle, cable operated

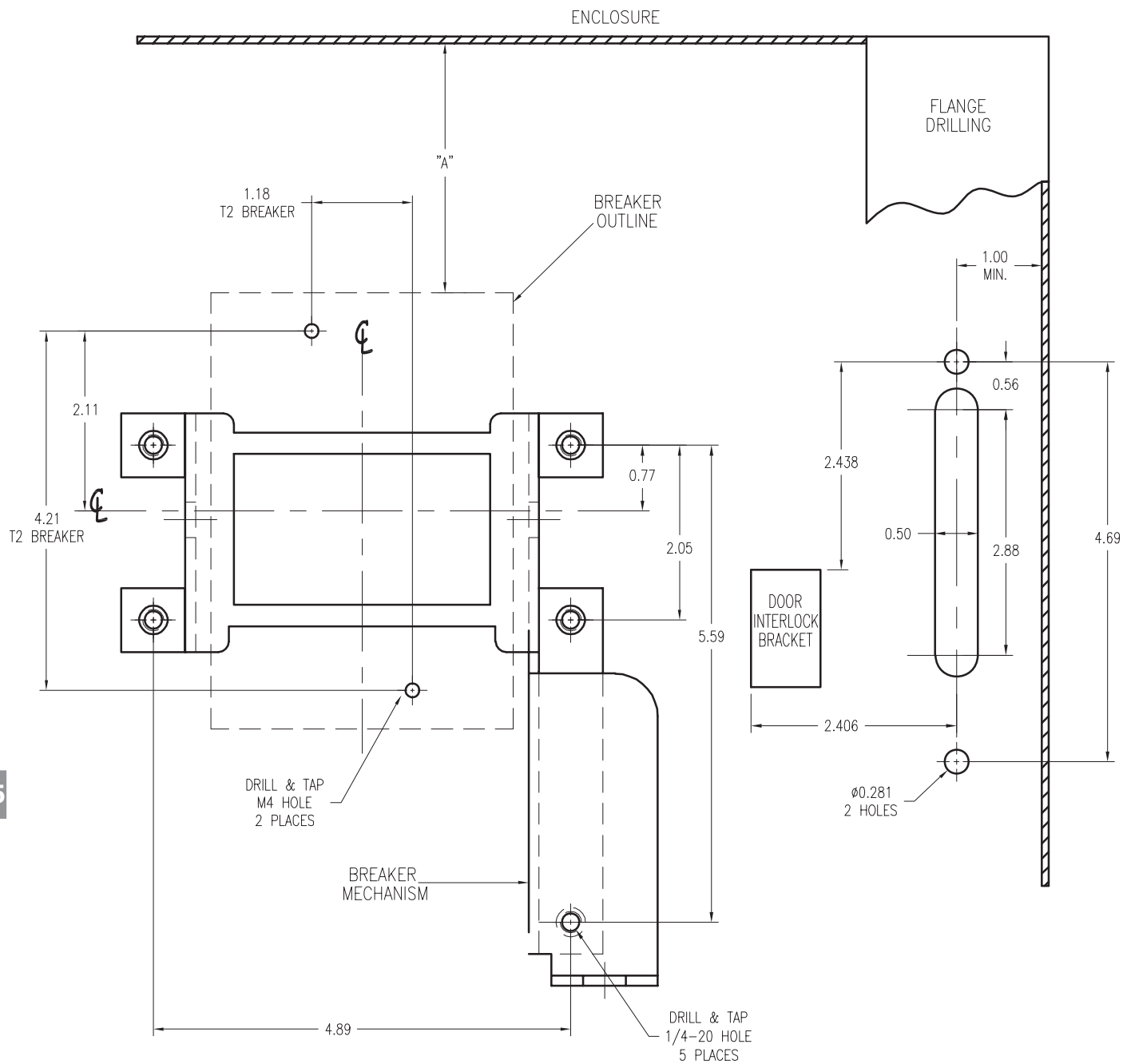
Tmax
MCCBs



NOTES:

1. "A" DIM. IS THE WIRING BENDING SPACE AS REQUIRED BY THE NATIONAL ELECTRIC CODE.
2. THE MINIMUM BEND RADIUS OF THE CABLE IS 3 INCHES.

Approximate dimensions T2 Flange handle, cable operated

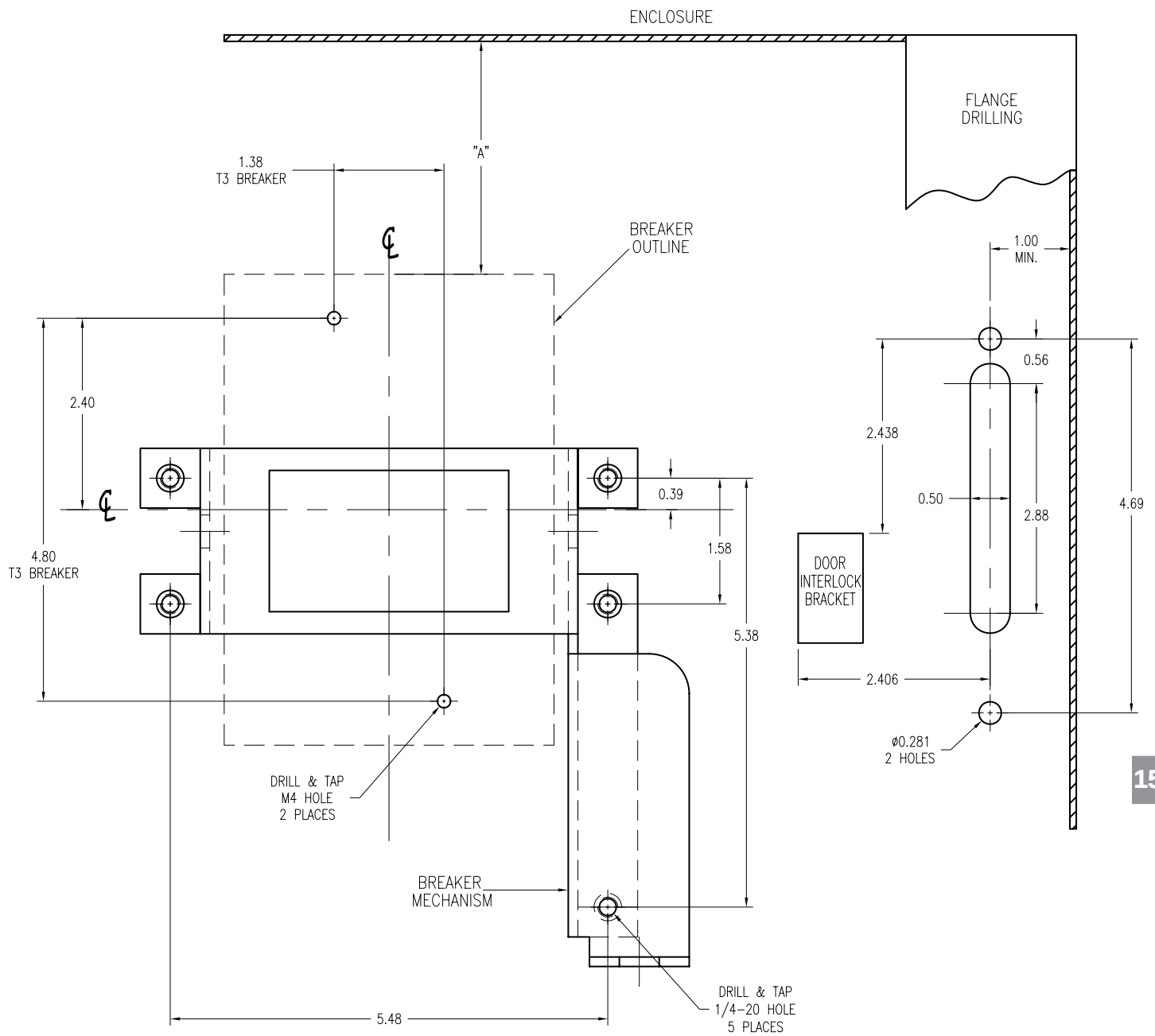


NOTES:

1. "A" DIM. IS THE WIRING BENDING SPACE AS REQUIRED BY THE NATIONAL ELECTRIC CODE.
2. THE MINIMUM BEND RADIUS OF THE CABLE IS 3 INCHES.

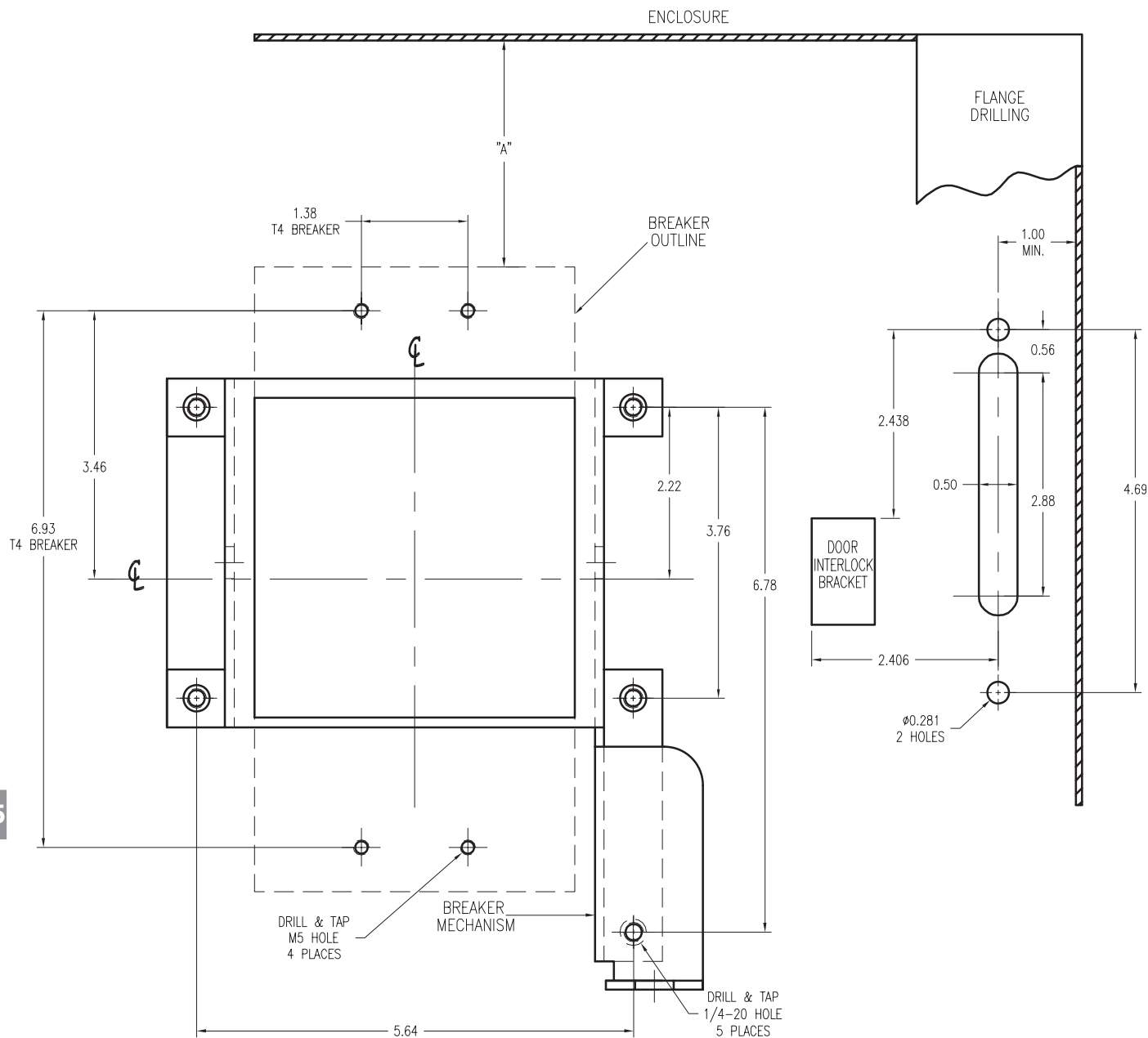
Approximate dimensions T3 Flange handle, cable operated

Tmax
MCCBs





Approximate dimensions T4 Flange handle, cable operated

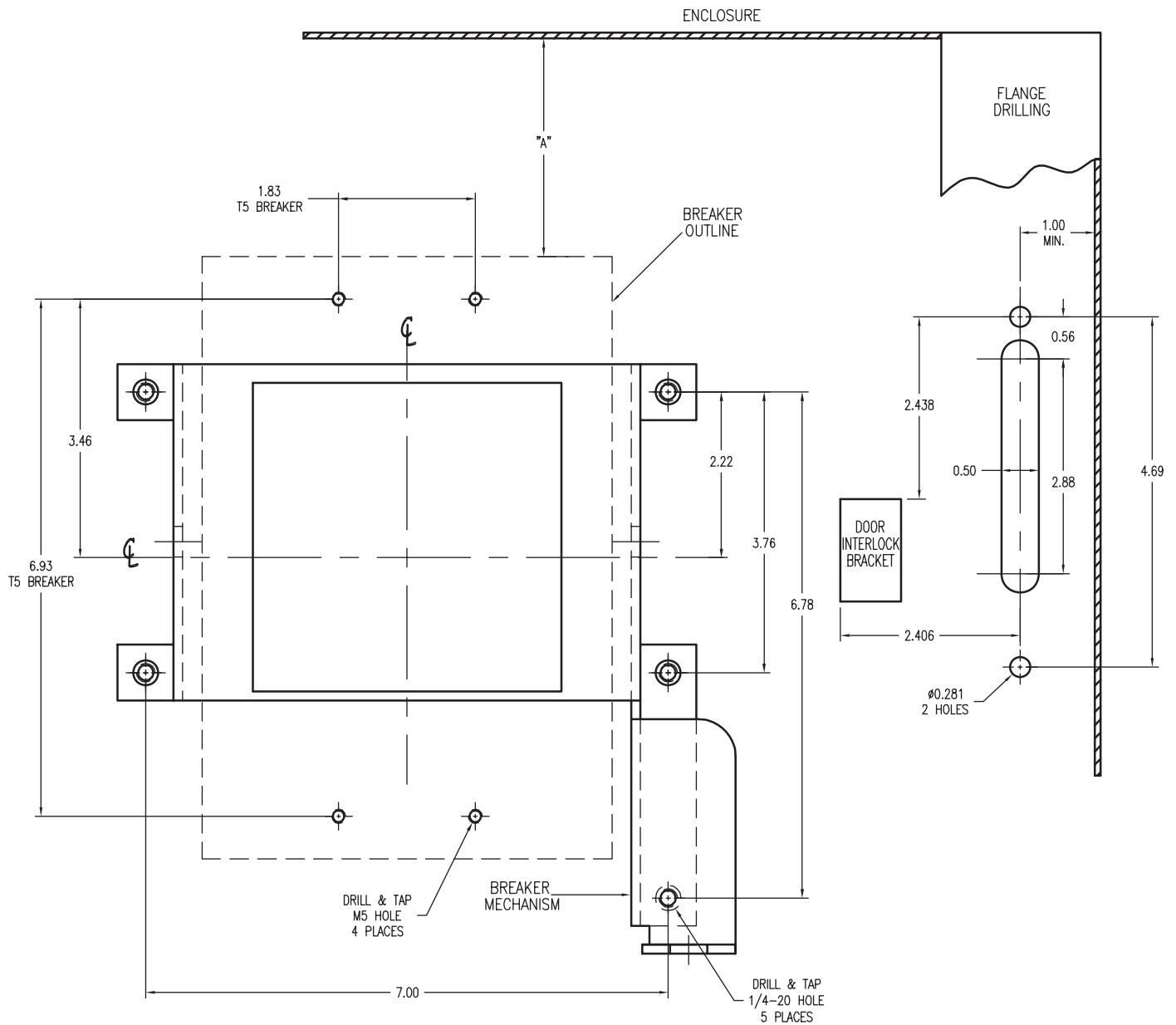


NOTES:

1. "A" DIM. IS THE WIRING BENDING SPACE AS REQUIRED BY THE NATIONAL ELECTRIC CODE.
2. THE MINIMUM BEND RADIUS OF THE CABLE IS 3 INCHES.

Approximate dimensions T5 Flange handle, cable operated

Tmax
MCCBs



NOTES:

1. "A" DIM. IS THE WIRING BENDING SPACE AS REQUIRED BY THE NATIONAL ELECTRIC CODE.
2. THE MINIMUM BEND RADIUS OF THE CABLE IS 3 INCHES.