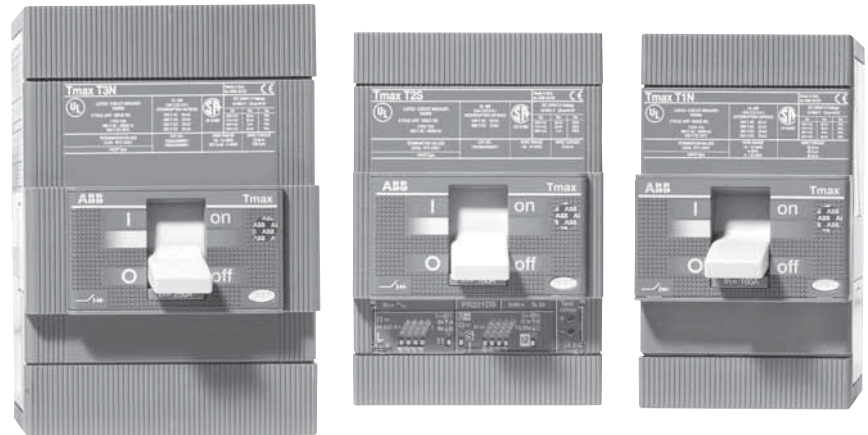


# Tmax Molded case circuit breakers



## 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

			Tmax T1 1P	Tmax T1	Tmax T2	Tmax T3						
<b>UL 489 CSA C22.2</b>												
Frame size	A		100	100	100	225						
Number of poles	Nr		1	3, 4	3, 4	3, 4						
Rated voltage	AC (50-60 Hz)	V	277	600Y / 347V	480	600Y/347V						
	DC	V		500		500						
Interrupting ratings			<b>B</b>	<b>N</b>	<b>S</b>	<b>H</b>	<b>N</b>	<b>S</b>				
	AC 240 V	kA		50 ②	65	100	50	65				
	277 V	kA	18 ①									
	480 V	kA		22 ②	35	65	25	35				
	600Y/347	kA		10			10	10				
	600 V	kA										
	DC 250 V - 2 poles in series	kA		25			25	35				
	500 V - 3 poles in series	kA		25			25	35				
Trip units	500 V - 2 poles in series	kA										
	600 V - 3 poles in series	kA										
	TMF		■	■	■	■	■	■				
	TMD/TMA											
	ELT				■	■						
Versions	MA				■	■	■	■				
	MCCB		■	■	■	■	■	■				
	MCS			■								
	MCP				■							
<b>IEC 60947-2</b>												
Rated uninterrupted current, Iu	A		160	160	160	250						
Number of poles	Nr		1	3,4	3,4	3,4						
Rated service voltage, Ue	AC (50-60 Hz)	V	240	690	690	690						
	DC	V	125	500	500	500						
Rated ultimate short circuit breaking capacity, Icu			<b>B</b>	<b>C</b>	<b>N</b>	<b>N</b>	<b>S</b>	<b>H</b>	<b>L</b>	<b>N</b>	<b>S</b>	
	AC (50-60 Hz)	kA	25	25	40	50	65	85	100	120	50	85
	220/230 V	kA		16	25	36	36	50	70	85	36	50
	380/415 V	kA		10	15	22	30	45	55	75	25	40
	440 V	kA		8	10	15	25	30	36	50	20	30
	500 V	kA		3	4	6	6	7	8	10	5	8
	690 V	kA		16	25	36	36	50	70	85	36	50
	DC	kA		20	30	40	40	55	85	100	40	55
	250 V - 2 poles in series	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	kA											
Trip units	TMF		■									
	TMD/TMA			■							■	
	ELT						■	■	■			
	MF											
	MA										■	
<b>UL 489 CSA C22.2 and IEC 60947-2</b>												
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

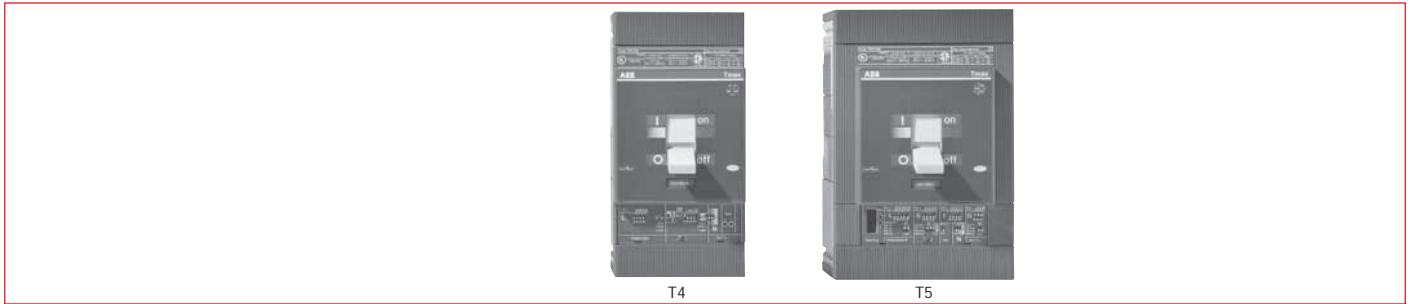
TMF = Thermomagnetic trip unit with fixed thermal and magnetic threshold

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

# General information

## Circuit breakers for power distribution

### T4 – T5



			Tmax T4					Tmax T5					
<b>UL 489 CSA C22.2</b>													
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	AC 240 V	kA	N	S	H	L	V	N	S	H	L	V	
		kA	65	100	150	200	200	65	100	150	200	200	
		kA	25	35	65	100	150	25	35	65	100	150	
		kA	18	25	35	65	100	18	25	35	65	100	
		kA	25	35	50	65	100	25	35	50	65	100	
	DC 250 V - 2 poles in series	kA	25	35	50	65	100	25	35	50	65	100	
		500 V - 3 poles in series	kA	16	25	35	50	65	16	25	35	50	65
		500 V - 2 poles in series	kA										
		600 V - 3 poles in series	kA										
			kA										
Trip units	TMF		■										
	TMD/TMA		■					■					
	ELT		■					■					
	MA							■					
	MCCB		■					■					
Versions	MCS		■					■					
	MCP		■					■					
<b>IEC 60947-2</b>													
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	AC (50-60 Hz)	kA	N	S	H	L	V	N	S	H	L	V	
		kA	70	85	100	200	300	70	85	100	200	300	
		kA	36	50	70	120	200	36	50	70	120	200	
		kA	30	40	65	100	180	30	40	65	100	180	
		kA	25	30	50	85	150	25	30	50	85	150	
	DC	kA	20	25	40	70	80	20	25	40	70	80	
		250 V - 2 poles in series	kA	36	50	70	120	200	36	50	70	120	200
		250 V - 3 poles in series	kA	25	36	50	70	100	25	36	50	70	100
		500 V - 2 poles in series	kA										
		500 V - 3 poles in series	kA										
Trip units	TMF		■					■					
	TMD/TMA		■					■					
	ELT		■					■					
	MF												
	MA		■										
<b>UL 489 CSA C22.2 and IEC 60947-2</b>													
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

			Tmax T1 1P	Tmax T1	Tmax T2	Tmax T3
<b>Circuit breakers for distribution AC-DC</b>						
Rated uninterrupted circuit		A	160	160	160	225
Number of poles		Nr	1	3, 4	3, 4	3, 4
Rated voltage	AC 50-60 Hz	V	240	690	690	690
		kA rms	<b>B</b>	<b>B C N</b>	<b>N S H L</b>	<b>N S</b>
	380/415 VAC	kA rms	25 ①	16 25 36	36 50 70 85	36 50
	440 VAC	kA rms		10 15 22	30 45 55 75	25 40
	690 VAC	kA rms		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
<b>Circuit breakers for motor protection</b>						
Iu		A			160	250
Poles					3	3
In		A			1 - 100	100 - 200
Ue		V			690	690
Trip unit	Adjustable magnetic only Electronic	(6 - 12xin) PR221DS-I PR222/MP (IEC 60947-4-1) PR212/P-I PR212/MP (IEC 60947-4-1)			■ ■	■
<b>Switch-disconnectors</b>						
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				
<b>Circuit breakers for distribution AC-DC</b>											
Rated uninterrupted current	A	250					400 - 630				
Number of poles	Nr	3, 4					3, 4				
Rated voltage	V	690					690				
Icu	kA rms	N	S	H	L	V	N	S	H	L	V
	kA rms	36	50	70	120	200	36	50	70	120	200
	kA	30	40	65	100	180	30	40	65	100	180
	kA	20	25	40	70	80	20	25	40	70	80
	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					in-mm 8.07 - 205				
	W	in-mm 4.13/105					in-mm 5.51/140				
	D	in-mm 4.07/103.5					in-mm 4.07/103.5				
<b>Circuit breakers for motor protection</b>											
Iu	A	250					400				
Poles		3					3				
In	V	80 - 250					320 - 400				
Ue	V	690					690				
Trip unit		Adjustable magnetic only (6 - 12xin)					Adjustable magnetic only (6 - 12xin)				
		■					■				
	Electronic	PR221DS-I					PR221DS-I				
		■					■				
		PR222/MP (IEC 60947-4-1)					PR222/MP (IEC 60947-4-1)				
		■					■				
		PR212P-I					PR212P-I				
		■					■				
		PR212/MP (IEC 60947-4-1)					PR212/MP (IEC 60947-4-1)				
		■					■				
<b>Switch-disconnectors</b>											
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

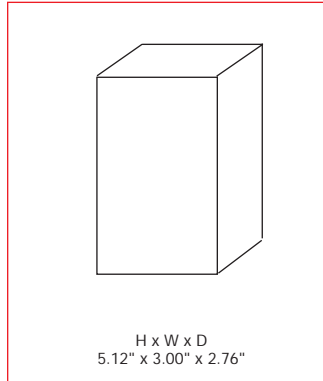


① Consult ABB for factory installed accessories.

# T1

## 100A, 600Y/347

### Standard thermal-magnetic



#### 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 <sup>①</sup>	<b>\$ 402</b>
		20A	1000A	T1N020TL	402
	22kA	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	<b>\$ 230</b>
		20A	1000A	T1B020TL-1	230
	18kA	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 <sup>②</sup>	Rating	Magnetic trip	480VAC/500VDC catalog number	List price
T1-D	240V, 50kA	100A	1000A	T1N100DL	<b>\$ 431</b>

#### 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 <sup>①</sup>	1000A	T1NQ015TL	<b>\$ 442</b>
		20	1000A	T1NQ020TL	
	25	1000A	T1NQ025TL		
	30	1000A	T1NQ030TL		
	40	1000A	T1NQ040TL		
	50	1500A	T1NQ050TL		
	22kA	60	1500A	T1NQ060TL	<b>527</b>
		70	1500A	T1NQ070TL	
		80	1500A	T1NQ080TL	
		90	1500A	T1NQ090TL	
		100	1500A	T1NQ100TL	

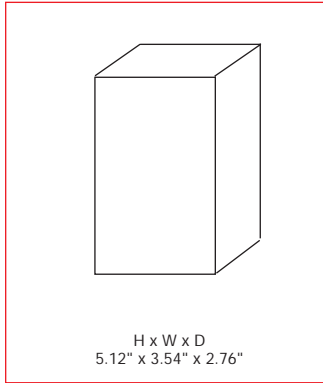
① Rated 277/480Y for 15A.

② With fuse or MCCB protected circuit.

# T2

## 100A, 480V

### Thermal-magnetic/electronic



#### 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	<b>\$ 690</b>
		20A	500A	T2S020TW	<b>690</b>
		25A	500A	T2S025TW	<b>690</b>
		30A	500A	T2S030TW	<b>690</b>
		40A	500A	T2S040TW	<b>690</b>
		50A	500A	T2S050TW	<b>690</b>
		60A	600A	T2S060TW	<b>690</b>
		70A	700A	T2S070TW	<b>793</b>
		80A	800A	T2S080TW	<b>793</b>
		90A	900A	T2S090TW	<b>793</b>
		100A	1000A	T2S100TW	<b>793</b>

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

#### 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	<b>\$ 1240</b>
			60A	T2S060BW	<b>1240</b>
			100A	T2S100BW	<b>1343</b>
T2H	65kA	PR221DS-LS/I	25A	T2H025BW	<b>1492</b>
			60A	T2H060BW	<b>1492</b>
			100A	T2H100BW	<b>1703</b>

#### 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	<b>\$ 598</b>
			50A	300 - 600	T2S050MW	<b>670</b>
			100A	600 - 1200	T2S100MW	<b>804</b>
T2H	65kA	Mag only	20A	120 - 240	T2H020MW	<b>673</b>
			50A	300 - 600	T2H050MW	<b>754</b>
			100A	600 - 1200	T2H100MW	<b>904</b>

#### 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	<b>\$ 1178</b>
			60A	60 - 600	T2S060E5W	<b>1178</b>
			100A	100 - 1000	T2S100E5W	<b>1276</b>
T2H	65kA	Instantaneous only	25A	25 - 250	T2H025E5W	<b>1417</b>
			60A	60 - 600	T2H060E5W	<b>1417</b>
			100A	100 - 1000	T2H100E5W	<b>1618</b>

## T2

### 100A, 480V, 100% rated

### Thermal-magnetic/electronic



#### T2 – 100A TMF, 100% rated

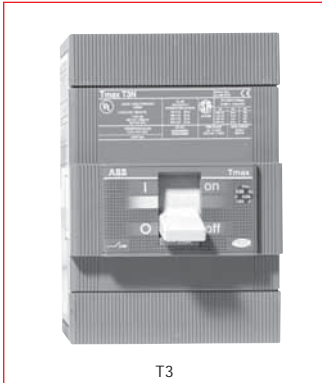
Breaker	IC at 480VAC	Rating	Magnetic trip	3 pole, 480VAC catalog number	List price	
T2S	35kA	15A	500A	T2SQ015TW	<b>\$ 760</b>	
		20A	500A	T2SQ020TW		
		25A	500A	T2SQ025TW		
		30A	500A	T2SQ030TW		
		40A	500A	T2SQ040TW		
		50A	500A	T2SQ050TW		
		60A	600A	T2SQ060TW		
		70A	700A	T2SQ070TW		<b>872</b>
		80A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

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

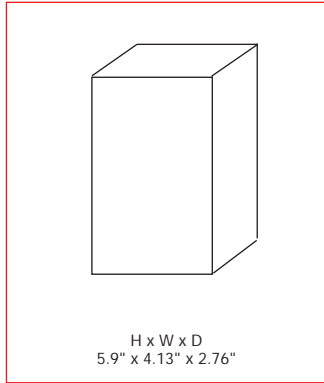
#### T2 – 100A frame electronic trip unit (AC only)

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

## 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	<b>\$ 615</b>
		70A	700A	T3N070TW	<b>740</b>
		80A	800A	T3N080TW	<b>740</b>
		90A	900A	T3N090TW	<b>740</b>
		100A	1000A	T3N100TW	<b>740</b>
		125A	1250A	T3N125TW	<b>1560</b>
		150A	1500A	T3N150TW	<b>1560</b>
		175A	1750A	T3N175TW	<b>1560</b>
		200A	2000A	T3N200TW	<b>1560</b>
		225A	2250A	T3N225TW	<b>1560</b>

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

#### 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	<b>\$ 1074</b>
			125A	750 - 1500	T3S125MW	<b>1108</b>
			150A	900 - 1800	T3S150MW	<b>1299</b>
			200A	1200 - 2400	T3S200MW	<b>1382</b>

#### T3S-D — Molded case switch

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

<sup>①</sup> 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	<b>\$ 656</b>
		70A	700A	T3NQ070TW	<b>812</b>
		80A	800A	T3NQ080TW	
		90A	900A	T3NQ090TW	
		100A	1000A	T3NQ100TW	
		125A	1250A	T3NQ125TW	<b>1717</b>
		150A	1500A	T3NQ150TW	
		175A	1750A	T3NQ175TW	
		200A	2000A	T3NQ200TW	
		225A	2250A	T3NQ225TW	

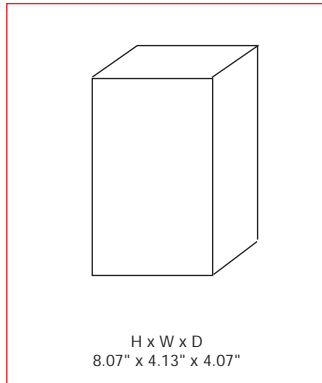
Breaker	IC at 480VAC	Rating	Magnetic trip	3 pole, 600/347V VAC/500VDC catalog number	List price
T3S	35kA	60A	600A	T3SQ060TW	<b>\$ 778</b>
		70A	700A	T3SQ070TW	<b>1065</b>
		80A	800A	T3SQ080TW	
		90A	900A	T3SQ090TW	
		100A	1000A	T3SQ100TW	
		125A	1250A	T3SQ125TW	<b>2399</b>
		150A	1500A	T3SQ150TW	
		175A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

Ⓢ With fuse or MCCB protected circuit.

# T4

## 250A, 600V

### Electronic and thermal magnetic trip units



#### 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	<b>\$ 1903</b>
		PR222 LSI	T4N100CW	<b>2540</b>
		PR222 LSIG	T4N100EW	<b>3330</b>
T4S	35	PR221 LS/I	T4S100BW	<b>2370</b>
		PR222 LSI	T4S100CW	<b>3164</b>
		PR222 LSIG	T4S100EW	<b>4148</b>
T4H	65	PR221 LS/I	T4H100BW	<b>4498</b>
		PR222 LSI	T4H100CW	<b>4845</b>
		PR222 LSIG	T4H100EW	<b>5877</b>
T4L	100	PR221 LS/I	T4L100BW	<b>5954</b>
		PR222 LSI	T4L100CW	<b>6063</b>
		PR222 LSIG	T4L100EW	<b>7091</b>
T4V	150	PR221 LS/I	T4V100BW	<b>8555</b>
		PR222 LSI	T4V100CW	<b>9213</b>
		PR222 LSIG	T4V100EW	<b>9957</b>

#### 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	<b>\$ 2050</b>
		PR222 LSI	T4N150CW	<b>2737</b>
		PR222 LSIG	T4N150EW	<b>3588</b>
T4S	35	PR221 LS/I	T4S150BW	<b>2542</b>
		PR222 LSI	T4S150CW	<b>3394</b>
		PR222 LSIG	T4S150EW	<b>4449</b>
T4H	65	PR221 LS/I	T4H150BW	<b>4633</b>
		PR222 LSI	T4H150CW	<b>5024</b>
		PR222 LSIG	T4H150EW	<b>6094</b>
T4L	100	PR221 LS/I	T4L150BW	<b>6174</b>
		PR222 LSI	T4L150CW	<b>6288</b>
		PR222 LSIG	T4L150EW	<b>7354</b>
T4V	150	PR221 LS/I	T4V150BW	<b>8872</b>
		PR222 LSI	T4V150CW	<b>9555</b>
		PR222 LSIG	T4V150EW	<b>10,326</b>

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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	<b>\$ 2112</b>
		PR222 LSI	T4N250CW	<b>2819</b>
		PR222 LSIG	T4N250EW	<b>3696</b>
T4S	35	PR221 LS/I	T4S250BW	<b>2573</b>
		PR222 LSI	T4S250CW	<b>3435</b>
		PR222 LSIG	T4S250EW	<b>4503</b>
T4H	65	PR221 LS/I	T4H250BW	<b>4713</b>
		PR222 LSI	T4H250CW	<b>5127</b>
		PR222 LSIG	T4H250EW	<b>6219</b>
T4L	100	PR221 LS/I	T4L250BW	<b>6300</b>
		PR222 LSI	T4L250CW	<b>6416</b>
		PR222 LSIG	T4L250EW	<b>7504</b>
T4V	150	PR221 LS/I	T4V250BW	<b>9053</b>
		PR222 LSI	T4V250CW	<b>9750</b>
		PR222 LSIG	T4V250EW	<b>10,537</b>

# 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
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
		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
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
		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	<b>\$ 2124</b>
		PR222 LSI	T4NQ100CW	<b>2835</b>
		PR222 LSIG	T4NQ100EW	<b>3716</b>
T4S	35	PR221 LS/I	T4SQ100BW	<b>2645</b>
		PR222 LSI	T4SQ100CW	<b>3531</b>
		PR222 LSIG	T4SQ100EW	<b>4629</b>
T4H	65	PR221 LS/I	T4HQ100BW	<b>5020</b>
		PR222 LSI	T4HQ100CW	<b>5383</b>
		PR222 LSIG	T4HQ100EW	<b>6530</b>
T4L	100	PR221 LS/I	T4LQ100BW	<b>6616</b>
		PR222 LSI	T4LQ100CW	<b>6737</b>
		PR222 LSIG	T4LQ100EW	<b>7879</b>
T4V	150	PR221 LS/I	T4VQ100BW	<b>9506</b>
		PR222 LSI	T4VQ100CW	<b>10,237</b>
		PR222 LSIG	T4VQ100EW	<b>11,063</b>

#### 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	<b>\$ 2288</b>
		PR222 LSI	T4NQ150CW	<b>3055</b>
		PR222 LSIG	T4NQ150EW	<b>4004</b>
T4S	35	PR221 LS/I	T4SQ150BW	<b>2837</b>
		PR222 LSI	T4SQ150CW	<b>3788</b>
		PR222 LSIG	T4SQ150EW	<b>4965</b>
T4H	65	PR221 LS/I	T4HQ150BW	<b>5171</b>
		PR222 LSI	T4HQ150CW	<b>5582</b>
		PR222 LSIG	T4HQ150EW	<b>6771</b>
T4L	100	PR221 LS/I	T4LQ150BW	<b>6860</b>
		PR222 LSI	T4LQ150CW	<b>6987</b>
		PR222 LSIG	T4LQ150EW	<b>8171</b>
T4V	150	PR221 LS/I	T4VQ150BW	<b>9858</b>
		PR222 LSI	T4VQ150CW	<b>10,616</b>
		PR222 LSIG	T4VQ150EW	<b>11,473</b>

15

#### 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	<b>\$ 2357</b>
		PR222 LSI	T4NQ250CW	<b>3146</b>
		PR222 LSIG	T4NQ250EW	<b>4125</b>
T4S	35	PR221 LS/I	T4SQ250BW	<b>2872</b>
		PR222 LSI	T4SQ250CW	<b>3834</b>
		PR222 LSIG	T4SQ250EW	<b>5025</b>
T4H	65	PR221 LS/I	T4HQ250BW	<b>5260</b>
		PR222 LSI	T4HQ250CW	<b>5697</b>
		PR222 LSIG	T4HQ250EW	<b>6910</b>
T4L	100	PR221 LS/I	T4LQ250BW	<b>7000</b>
		PR222 LSI	T4LQ250CW	<b>7129</b>
		PR222 LSIG	T4LQ250EW	<b>8338</b>
T4V	150	PR221 LS/I	T4VQ250BW	<b>10,058</b>
		PR222 LSI	T4VQ250CW	<b>10,833</b>
		PR222 LSIG	T4VQ250EW	<b>11,708</b>

# T4

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

### Magnetic only MCPs



#### 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



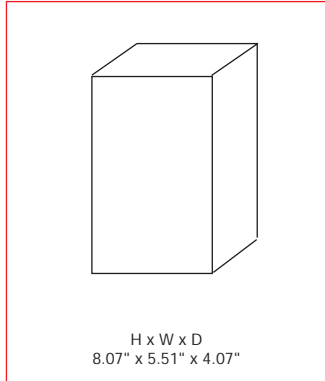
# T5

## 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	<b>\$ 3260</b>
		PR222 LSI	T5N300CW	<b>3865</b>
		PR222 LSIG	T5N300EW	<b>4965</b>
T5S	35	PR221 LS/I	T5S300BW	<b>3350</b>
		PR222 LSI	T5S300CW	<b>3945</b>
		PR222 LSIG	T5S300EW	<b>5138</b>
T5H	65	PR221 LS/I	T5H300BW	<b>5395</b>
		PR222 LSI	T5H300CW	<b>5893</b>
		PR222 LSIG	T5H300EW	<b>7148</b>
T5L	100	PR221 LS/I	T5L300BW	<b>6860</b>
		PR222 LSI	T5L300CW	<b>7375</b>
		PR222 LSIG	T5L300EW	<b>8625</b>
T5V	150	PR221 LS/I	T5V300BW	<b>10,406</b>
		PR222 LSI	T5V300CW	<b>11,206</b>
		PR222 LSIG	T5V300EW	<b>12,111</b>

#### 400A Frame

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

#### 600A Frame

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



## 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	<b>\$ 2612</b>
T5S	35	300A 400A	1500-3000 2000-4000	T5S300TW T5S400TW	<b>2880</b>
T5H	65	300A 400A	1500-3000 2000-4000	T5H300TW T5H400TW	<b>4950</b>
T5L	100	300A 400A	1500-3000 2000-4000	T5L300TW T5L400TW	<b>6400</b>
T5V	150	300A 400A	1500-3000 2000-4000	T5V300TW T5V400TW	<b>9873</b>

#### Molded case switch

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

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	<b>\$ 3628</b>
		PR222 LSI	T5NQ300CW	<b>4302</b>
		PR222 LSIG	T5NQ300EW	<b>5526</b>
T5S	35	PR221 LS/I	T5SQ300BW	<b>3729</b>
		PR222 LSI	T5SQ300CW	<b>4391</b>
		PR222 LSIG	T5SQ300EW	<b>5719</b>
T5H	65	PR221 LS/I	T5HQ300BW	<b>6005</b>
		PR222 LSI	T5HQ300CW	<b>6559</b>
		PR222 LSIG	T5HQ300EW	<b>7956</b>
T5L	100	PR221 LS/I	T5LQ300BW	<b>7635</b>
		PR222 LSI	T5LQ300CW	<b>8208</b>
		PR222 LSIG	T5LQ300EW	<b>9600</b>
T5V	150	PR221 LS/I	T5VQ300BW	<b>11,582</b>
		PR222 LSI	T5VQ300CW	<b>12,473</b>
		PR222 LSIG	T5VQ300EW	<b>13,480</b>

#### 400A Frame

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

### 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	<b>\$ 2888</b>
		400A	2000-4000	T5NQ400TW	
T5S	35	300A	1500-3000	T5SQ300TW	<b>3185</b>
		400A	2000-4000	T5SQ400TW	
T5H	65	300A	1500-3000	T5HQ300TW	<b>5475</b>
		400A	2000-4000	T5HQ400TW	
T5L	100	300A	1500-3000	T5LQ300TW	<b>7078</b>
		400A	2000-4000	T5LQ400TW	
T5V	150	300A	1500-3000	T5VQ300TW	<b>10,920</b>
		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	<b>\$ 3097</b>
T5S	35kA	Instantaneous only	300A 400A	300-3000 400-4000	T5S300E5W T5S400E5W	<b>3183</b>
T5H	65kA	Instantaneous only	300A 400A	300-3000 400-4000	T5H300E5W T5H400E5W	<b>5125</b>
T5L	100kA	Instantaneous only	300A 400A	300-3000 400-4000	T5L300E5W T5L400E5W	<b>6517</b>

### 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	<b>\$ 5615</b>
T5S	35kA	Instantaneous only	600A	600-6000	T5S600E5W	<b>5770</b>
T5H	65kA	Instantaneous only	600A	600-6000	T5H600E5W	<b>7761</b>
T5L	100kA	Instantaneous only	600A	600-6000	T5L600E5W	<b>9370</b>

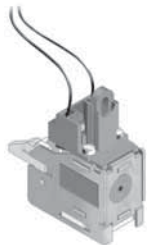
① 600A Not available with thermal magnetic trip unit.

# Accessories

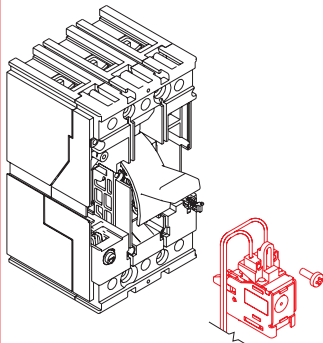
## Electrical

### T1 - T3

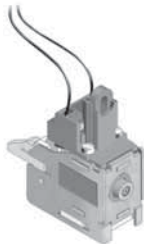
Tmax  
MCCBs



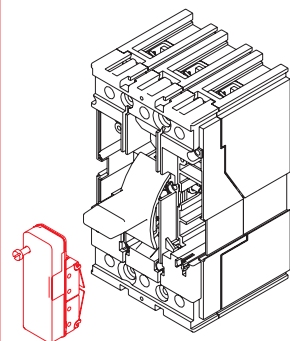
KT3S4



T1 with KT3S4



KT3U2



T1 with K3TAS



KT3M1

### Shunt trips

Voltage	Factory installation		Field installation	
	Catalog number suffix ①	List price adder	Catalog number T1 - T3	List price
480 - 500VAC	S1	<b>\$ 535</b>	KT3S1	<b>\$ 490</b>
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	<b>\$ 535</b>	KT3U1	<b>\$ 490</b>
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	<b>\$ 433</b>	KT3AS	<b>\$ 380</b>
3 Form C + 1 BA	A3	<b>770</b>	KT3AS3	<b>725</b>
T2 PR221DS 1 Form C + 1 BA	A	<b>433</b>	KT2AS-E	<b>380</b>
3 form C + 1 BA 24VDC	A3AU	<b>770</b>	KT3AS3-AU	<b>725</b>

### Electrical operators

Voltage	Field installation	
	Catalog number	List Price
48 - 60VAC/DC	KT3M1	<b>\$ 850</b>
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



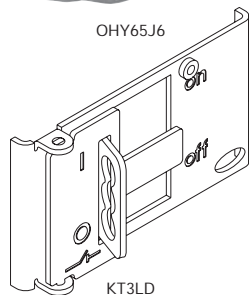
KT3RH



OHB65J6



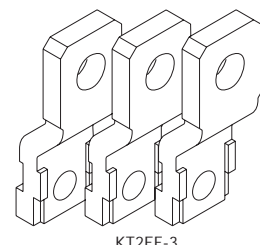
OHY65J6



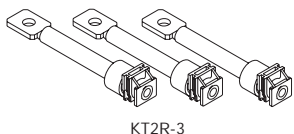
KT3LD



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
<b>NEMA 1, 3R, 12</b>						
Tmax	KT3VD-M	\$ 72	OXPEX430 ①	\$ 28	OHY65J6 ① OHB65J6 ①	\$ 80
<b>NEMA 4, 4X</b>						
Tmax	KT3VD-M	72	OXPEX430 ①	28	OHY80L6 ① OHB80L6 ①	130
<b>NEMA 1</b>						
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
<b>Standard cable lugs</b>						
T1	100	14AWG -1/0	Integral	—	Integral	—
T2	100	14AWG -1/0	KT2100-3	\$ 9	KT2100-4	\$ 12
T3	60	14AWG -2AWG	KT3060-3	9	KT3060-4	12
	100	14AWG -1/0	KT3100-3	9	KT3100-4	12
	150	2AWG -4/0	KT3150-3	12	KT3150-4	18
	225	4AWG-300kcmil	KT3225-3	18	KT3225-4	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	14AWG - 1/0	KT3100-3C	\$ 16	KT3100-4C	\$ 19
	150	2AWG - 4/0	KT3150-3C	16	KT3150-4C	19
	225	4AWG - 350kcmil	KT3225-3C	25	KT3225-4C	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		Set of 3			
	Amps	Wire range		Catalog number	List Price
	225	(6) #14-6		KT3TN	\$ 125

## OHB 65 J 6

**Color** ●  
B = Black  
Y = Red/Yellow

**Physical size** (length in mm) ●

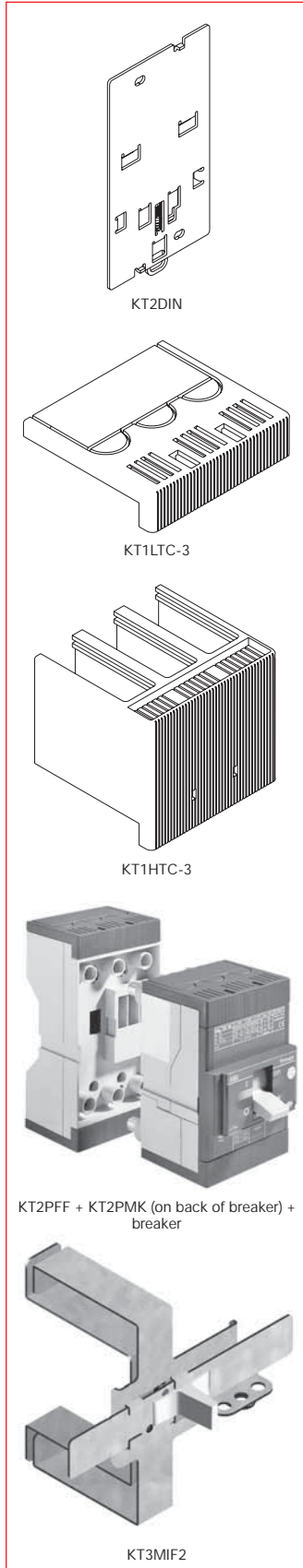
● **Shaft size** (diameter in mm)

● **J** = Type 1, 3R, 12

● **L** = Type 1, 3R, 12, 4, 4X

① Use Discount Schedule H6.

# Accessories Mechanical T1 - T3



## 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

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

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	<b>\$ 123</b>	K5C036	36" (91cm)	<b>\$ 114</b>	K5FCH	<b>\$ 213</b>
T1/T2	4,4X	KT2FPM		K5C048	48" (122cm)	<b>146</b>	K5FCH4	<b>243</b>
T3	1,3R,12	KT3FPM		K5C060	60" (152cm)	<b>160</b>	K5FCH	<b>213</b>
T3	4,4X	KT3FPM		K5C072	72" (183cm)	<b>175</b>	K5FCH4	<b>243</b>

**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	<b>\$ 200</b>
Door hardware kit, right hand, 3 point latch for enclosures 40 inches high or greater	KDH3R	<b>225</b>

#### Enclosure depths

##### Minimum

Breaker	Depth (inches)
T1 - T3	8

##### Maximum

Maximum depth is determined by cable length.

# Accessories Electrical T4 - T5



## Shunt trips (Standard)

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

## 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	SP4	<b>\$ 535</b>	KT5SP4	<b>\$ 490</b>
24 - 30 VAC/DC	SP8		KT5SP8	

## Undervoltage release

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

## 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	A	<b>\$ 433</b>	KT5AS	<b>\$ 380</b>
3 Form C + 1 BA, 250 VAC/VDC	A3		KT5AS3	
3 Form C + 1 BA, 24 VDC	A3AU		KT5AS3-AU	

## Stored energy motor operator

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

## Stored energy motor operator - Contact remote/manual operation

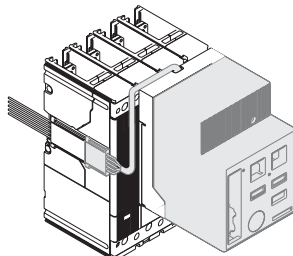
Contacts	Factory installation		Field installation	
	Catalog number suffix	List price adder	Catalog number	List Price
1 Form C	MA	<b>\$ 265</b>	KT5MA	<b>\$ 220</b>

## Adapters ②

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

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	<b>\$ 135</b>
Direct mount rotary handle (for withdrawable breakers)	KT5RHW	

### Variable depth rotary handles

Item	Catalog number	List Price
Mechanism	KT5VD-M	<b>\$ 65</b>
NEMA 1, 12, 3R Handle (Black)	OHB95J10 ①	<b>80</b>
NEMA 1, 12, 3R Handle (Grey)	OHG95J10 ①	<b>80</b>
NEMA 4, 4X Handle (Black)	OHB95L10 ①	<b>120</b>
NEMA 4, 4X Handle (Grey)	OHG95L10 ①	<b>120</b>
Shaft (148mm / 5.8 in)	OSP10X148 ①	<b>24</b>
Shaft (225mm / 8.9 in)	OSP10X225 ①	<b>26</b>
Shaft (500mm / 19.7 in)	OSP10X500 ①	<b>32</b>
NEMA 1 Handle, square profile	KT5VD-H	<b>87</b>
Shaft (500mm/19.7in)	KT5VD-S	

### Locking devices

	Catalog number	List price
Locking device	KT5FLD	<b>\$ 40</b>
Locking device draw out	KT5FLDW	<b>55</b>

### 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	<b>\$ 250</b>	KT4PFEE	<b>\$ 710</b>
T4, 3 pole with rear horizontal terminal			KT4PFHR	<b>766</b>
T4, 3 pole with rear vertical terminal			KT4PFVR	<b>766</b>
T5, 3 pole with extended front terminal	KT5PMK	<b>350</b>	KT5PFEE	<b>810</b>
T5, 3 pole with rear horizontal terminal			KT5PFHR	<b>866</b>
T5, 3 pole with rear vertical terminal			KT5PFVR	<b>866</b>

### 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	<b>\$ 290</b>	KT4WFEF	<b>\$ 816</b>
T4, 3 pole with rear horizontal terminal			KT4WFHR	<b>1021</b>
T4, 3 pole with rear vertical terminal			KT4WFVR	<b>1021</b>
T5, 3 pole with extended front terminal	KT5WMK	<b>407</b>	KT5WFEF	<b>931</b>
T5, 3 pole with rear horizontal terminal			KT5WFHR	<b>1154</b>
T5, 3 pole with rear vertical terminal			KT5WFVR	<b>1154</b>

### 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	<b>\$ 6</b>	KT4100-3	<b>\$ 9</b>	KT4100-4	<b>\$ 12</b>
	250	6 AWG - 350 kcmil	KT4250-2	<b>20</b>	KT4250-3	<b>30</b>	KT4250-4	<b>40</b>
T5	300	250kcmil - 500 kcmil	KT5300-2	<b>30</b>	KT5300-3	<b>45</b>	KT5300-4	<b>60</b>
	400	(2) 3/0 - 250 kcmil	KT5400-2	<b>30</b>	KT5400-3	<b>45</b>	KT5400-4	<b>60</b>
T5	600	(2) 3/0 - 500 kcmil	KT5600-2	<b>TBD</b>	KT5600-3	<b>TBD</b>	KT5600-4	<b>TBD ②</b>

### 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	<b>\$ 10</b>	KT4100-3C	<b>\$ 15</b>	KT4100-4C	<b>\$ 20</b>
	250	6 AWG - 350 kcmil	KT4250-2C	<b>24</b>	KT4250-3C	<b>36</b>	KT4250-4C	<b>48</b>
T5	300	250 kcmil - 500 kcmil	KT5300-2C	<b>34</b>	KT5300-3C	<b>51</b>	KT5300-4C	<b>68</b>
	400	(2) 3/0 - 250 kcmil	KT5400-2C	<b>34</b>	KT5400-3C	<b>51</b>	KT5400-4C	<b>68</b>

① Use Discount schedule SH.

② 600A load side lugs not compatible with flange handle mechanism.



KT4PMK (on back of breaker)



KT4PFVR



KT4WMK (on back of breaker)

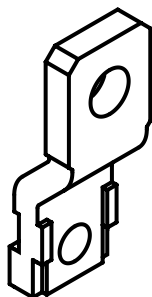


KT5WFVR

# Accessories

## Mechanical

### T4 - T5



KT4EF-<sub>1</sub>

#### 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	600	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



KT4LTC-3



KT4HTC-3

#### 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	<b>\$ 148</b>	K5C036	36" (91 <sub>cm</sub> )	<b>\$ 114</b>	K5FCH	<b>\$ 213</b>
T4	4, 4X	KT4FPM		K5C048	48" (122 <sub>cm</sub> )	<b>146</b>	K5FCH4	<b>243</b>
T5	1, 3R, 12	KT5FPM	<b>193</b>	K5C060	60" (152 <sub>cm</sub> )	<b>160</b>	K5FCH	<b>213</b>
T5	4, 4X	KT5FPM		K5C060	72" (183 <sub>cm</sub> )	<b>175</b>	K5FCH4	<b>243</b>
-	-	-	-	K5C084	84" (213 <sub>cm</sub> )	<b>204</b>	-	-
-	-	-	-	K5C096	96" (244 <sub>cm</sub> )	<b>221</b>	-	-
-	-	-	-	K5C108	108" (274 <sub>cm</sub> )	<b>238</b>	-	-
-	-	-	-	K5C120	120" (305 <sub>cm</sub> )	<b>256</b>	-	-

**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.  
 T5 mechanism is NOT compatible with 600A load side lugs

#### 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	<b>\$ 200</b>
Door hardware kit, right hand, 3 point latch for enclosures 40 inches high or greater	KDH3R	<b>225</b>

#### 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		Approximate dimensions① H x W x D (inches)	Catalog number	List price
		AL cables	CU cables			
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.

## 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

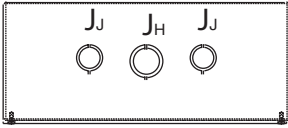
- Type 3R is intended for outdoor use providing protection against rain, sleet or snow.
- Type 12 is for use in indoor atmospheres to provide a degree of protection against circulating dust, lint, sawdust, falling dirt and dripping non-corrosive liquids.
- Surface-mounted, sheet steel enclosure.
- Breaker 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

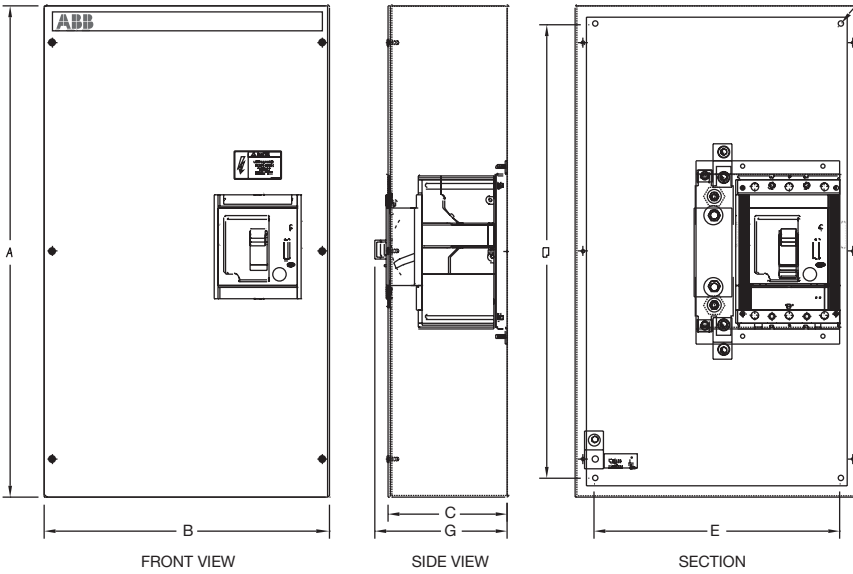
## Approximate dimensions, T1 – T5 NEMA 1, 3R & 12

### NEMA 1



SHOWN WITH BREAKER, PADLOCK DEVICE AND NEUTRAL KIT ORDERED SEPARATELY

F MTG HOLES  
4 PLACES



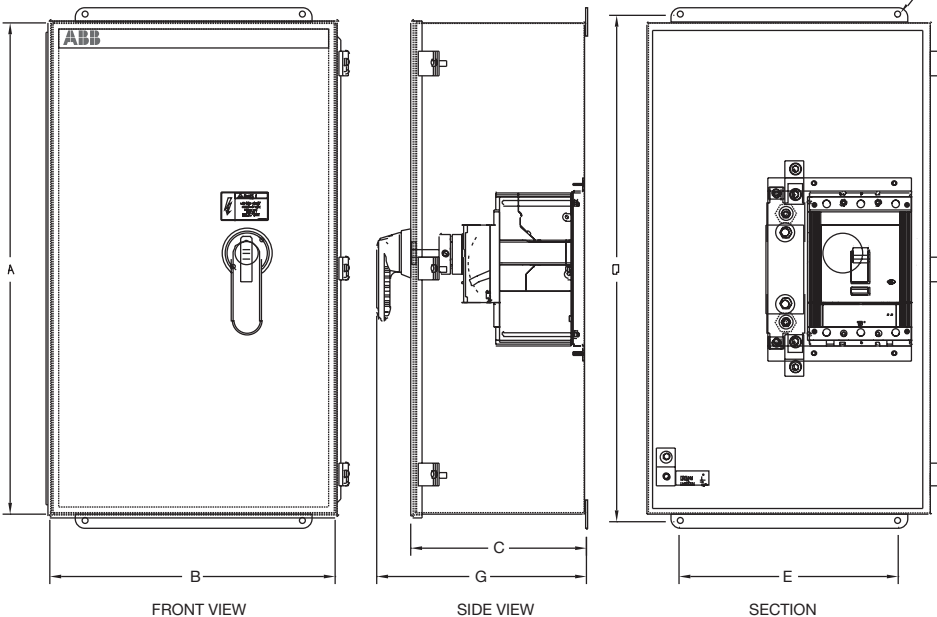
Cat. #	A	B	C	D	E	F	G	H	J
T1E-1	15.00 381	8.50 216	4.00 102	13.00 330	6.50 165	0.281 7	4.93 125	1, 1-1/4 25, 32	3/4, 1 19, 25
T2E-1	15.00 381	8.50 216	4.00 102	13.00 330	6.50 165	0.281 7	4.93 125	1, 1-1/4 25, 32	3/4, 1 19, 25
T3E-1	20.00 508	11.00 279	4.00 102	18.00 457	9.00 229	0.281 7	4.93 125	1, 1-1/4 25, 32	3/4, 1 19, 25
T4E-1	26.00 660	15.00 381	6.25 159	24.00 610	13.00 330	0.281 7	7.01 178	1, 1-1/4 25, 32	3/4, 1 19, 25
T5E-1	26.00 660	15.00 381	6.25 159	24.00 610	13.00 330	0.281 7	7.01 178	1, 1-1/4 25, 32	3/4, 1 19, 25

### NEMA 3R, 12

15

SHOWN WITH BREAKER, VARI-DEPTH MECHANISM, HANDLE, SHAFT AND NEUTRAL KIT, ORDERED SEPARATELY

F MTG HOLES  
4 PLACES



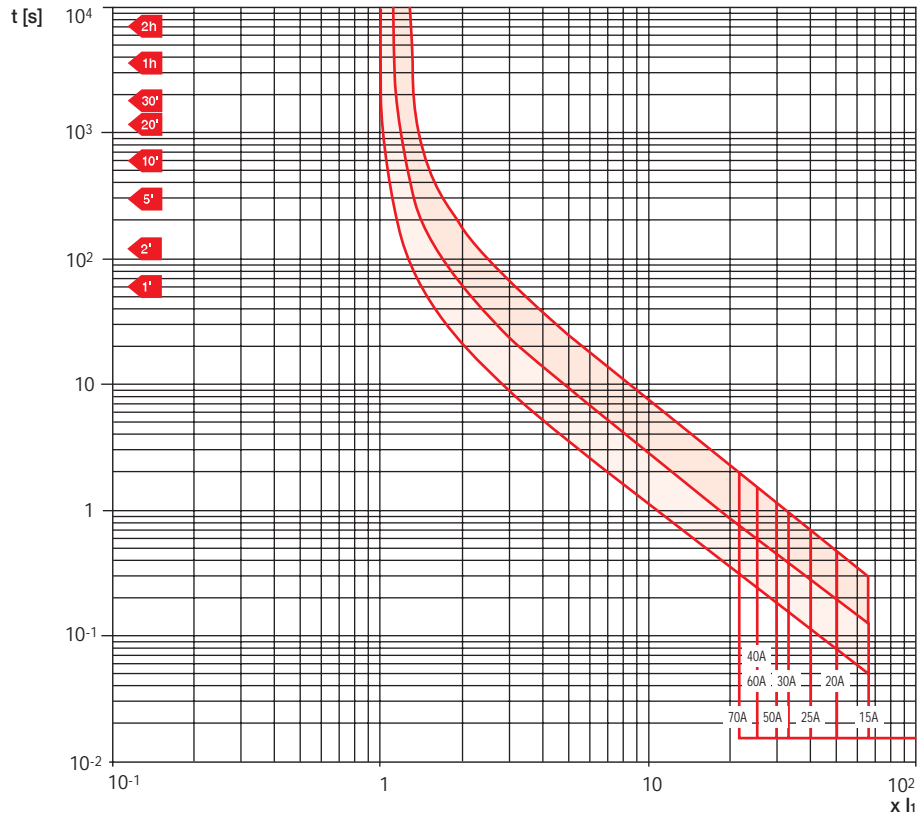
Cat. #	A	B	C	D	E	F	G
T1E-3R12	15.00 381	8.50 216	7.00 178	15.75 400	5.00 127	0.313 8	9.06 230
T2E-3R12	15.00 381	8.50 216	7.00 178	15.75 400	5.00 127	0.313 8	9.06 230
T3E-3R12	20.00 508	11.00 279	7.00 178	20.75 527	7.50 191	0.313 8	9.06 230
T4E-3R12	26.00 660	15.00 381	9.00 229	26.75 679	11.50 292	0.313 8	11.06 281
T5E-3R12	26.00 660	15.00 381	9.00 229	26.75 679	11.50 292	0.313 8	11.06 281

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



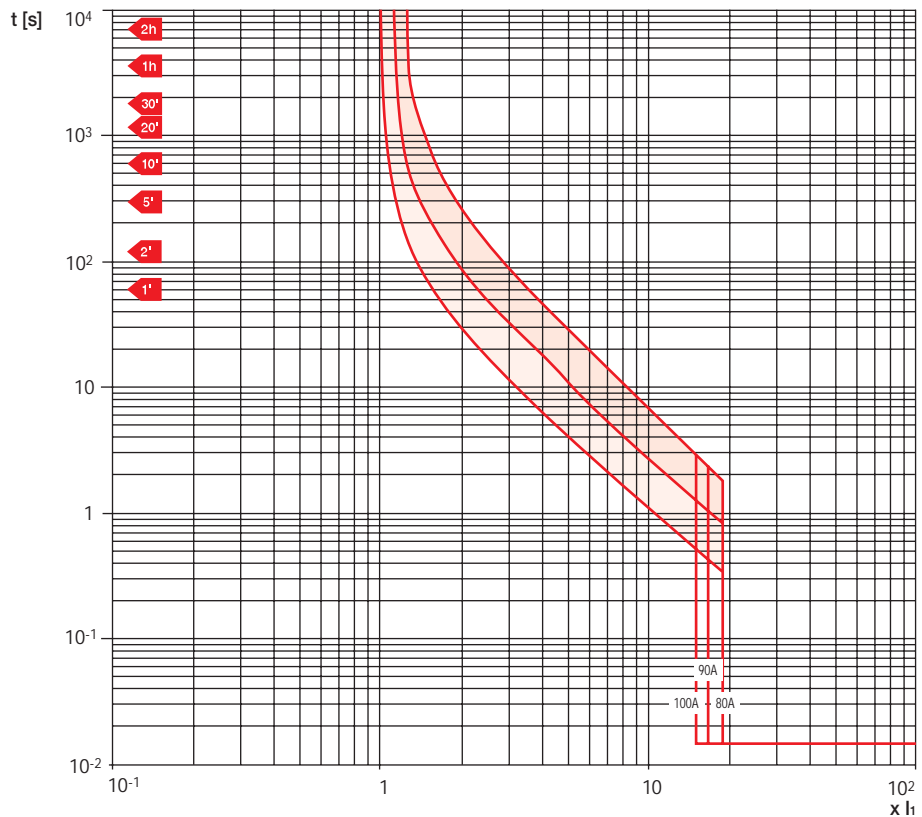
## T1 100-T1 100 1P TMF

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



## T1 100-T1 100 1P TMF

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

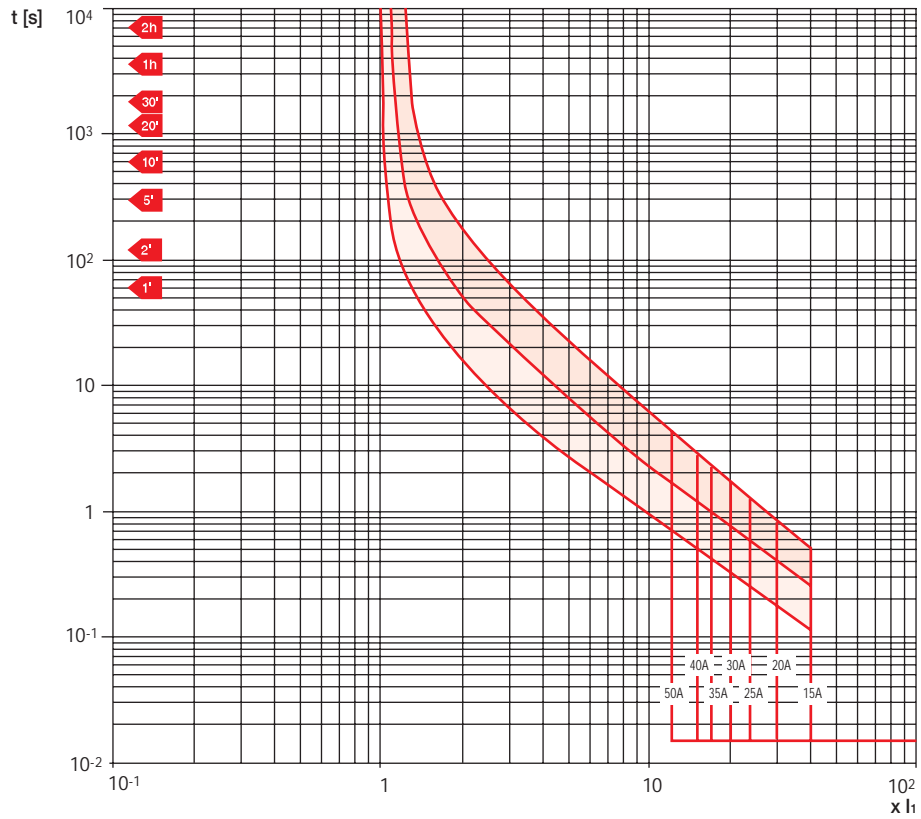




# Trip curves for distribution Circuit breakers w/thermagnetic trip units Tmax T2

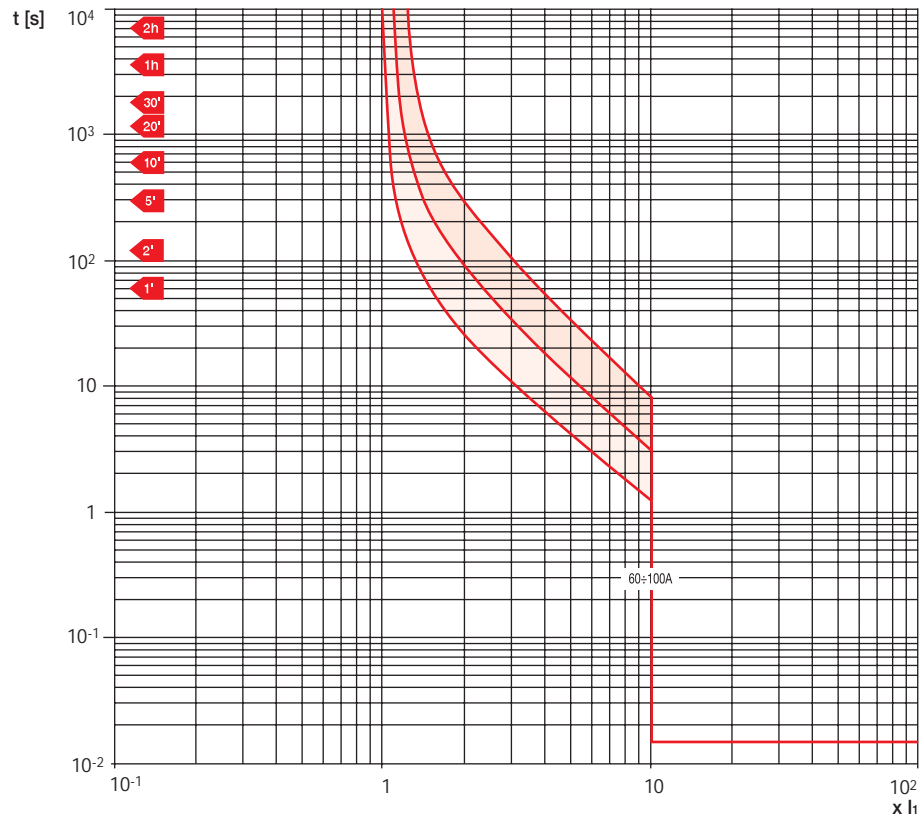
## T2 100 TMF

In = 15 ÷ 50 A



## T2 100 TMF

In = 60 ÷ 100 A



# Trip curves for distribution

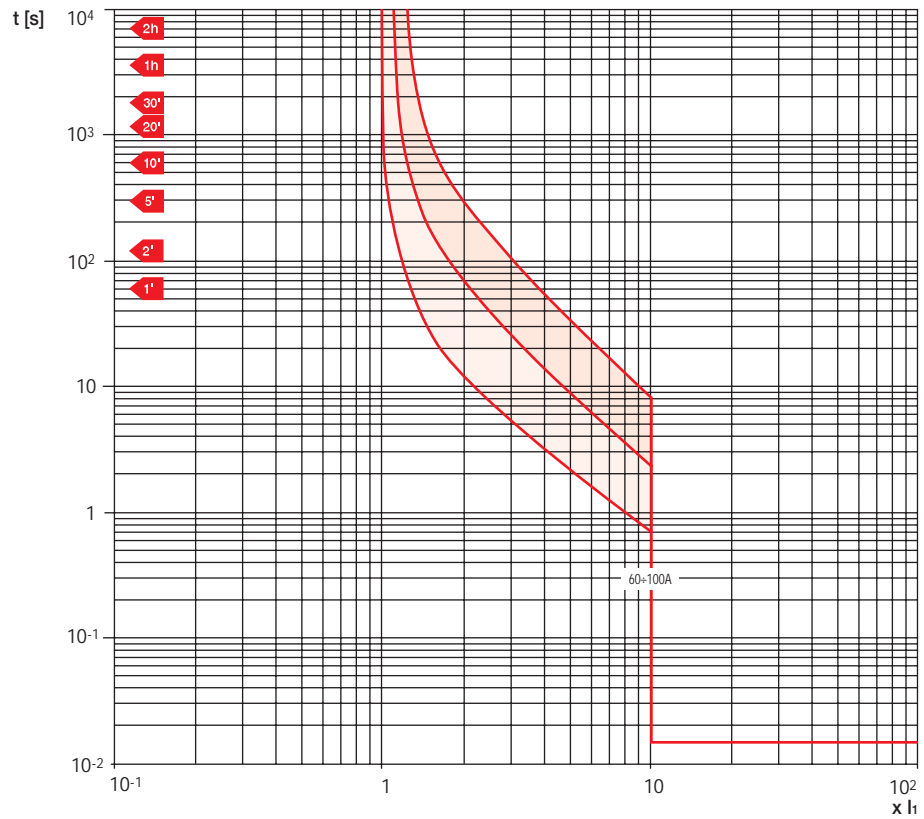
## Circuit breakers w/thermagnetic trip units

### Tmax T3



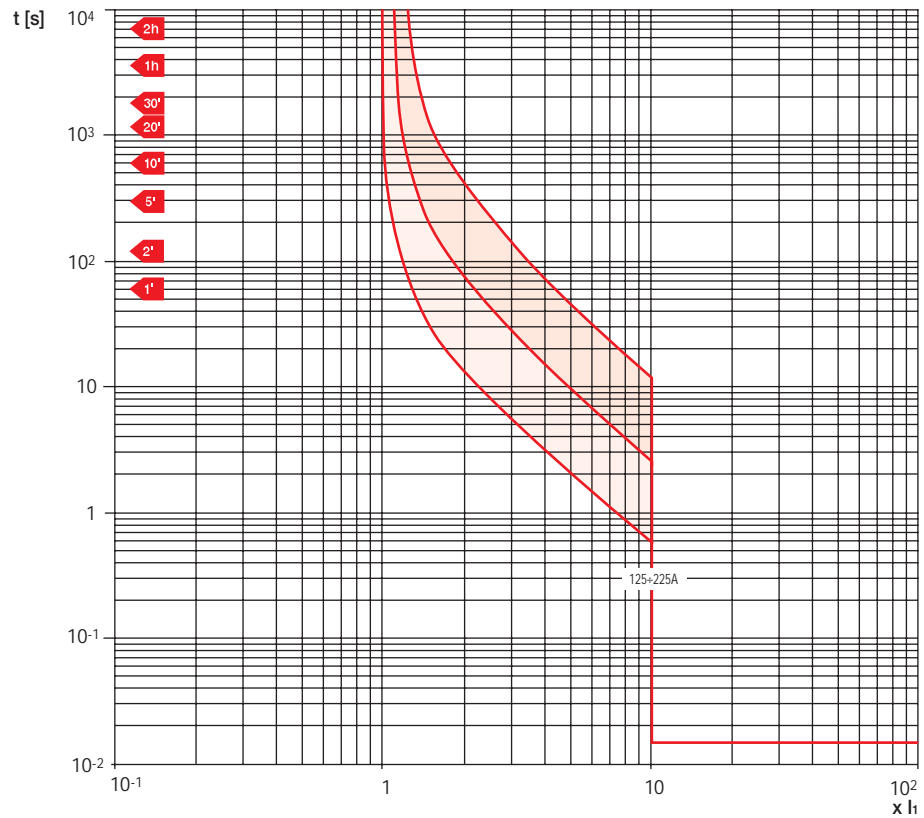
#### T3 225 TMF

In = 60 ÷ 100 A



#### T3 225 TMF

In = 125 ÷ 225 A

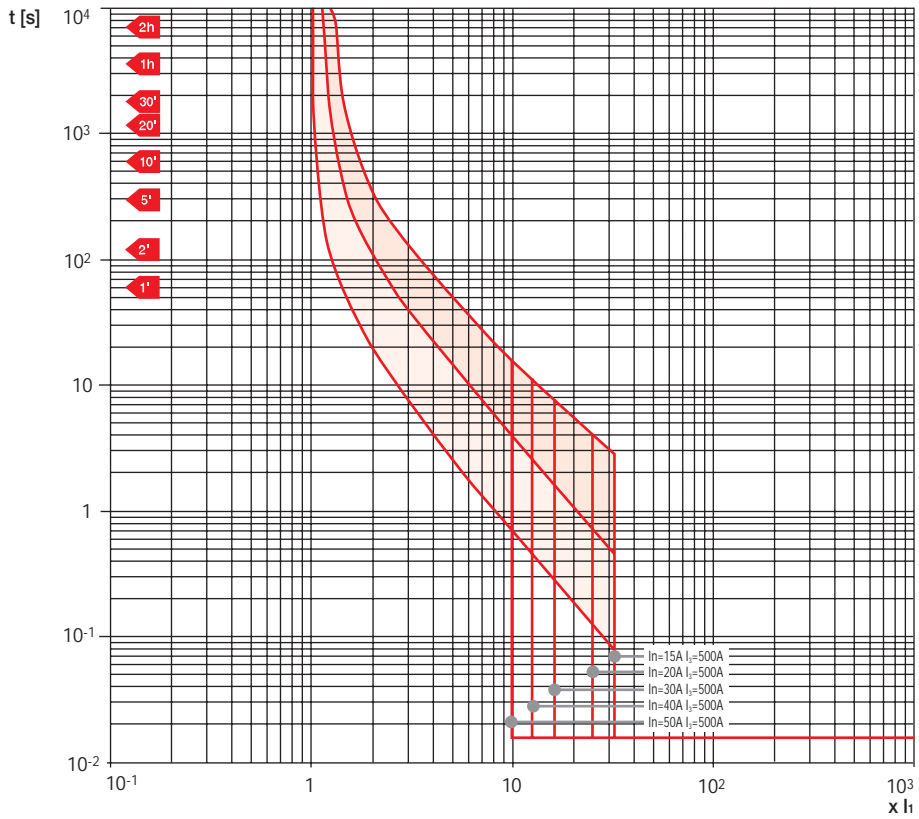




# Trip curves for distribution Circuit breakers w/thermagnetic trip units Tmax T4

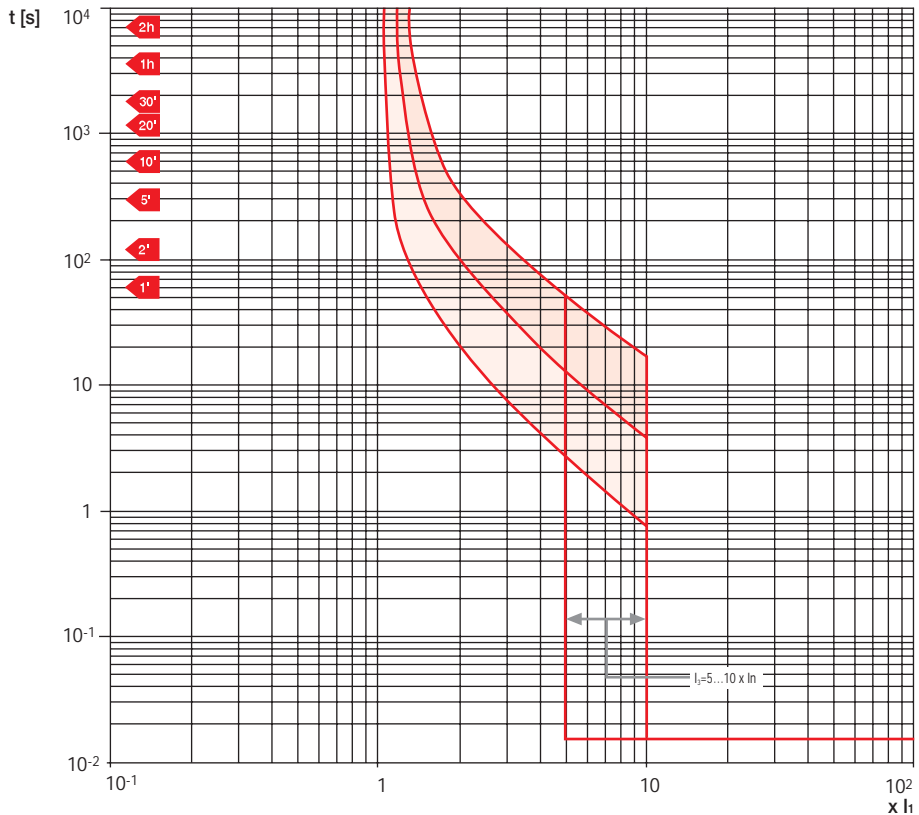
## T4 250 TMF/TMD

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



## T4 250 TMA

$I_n = 80 \div 250$  A

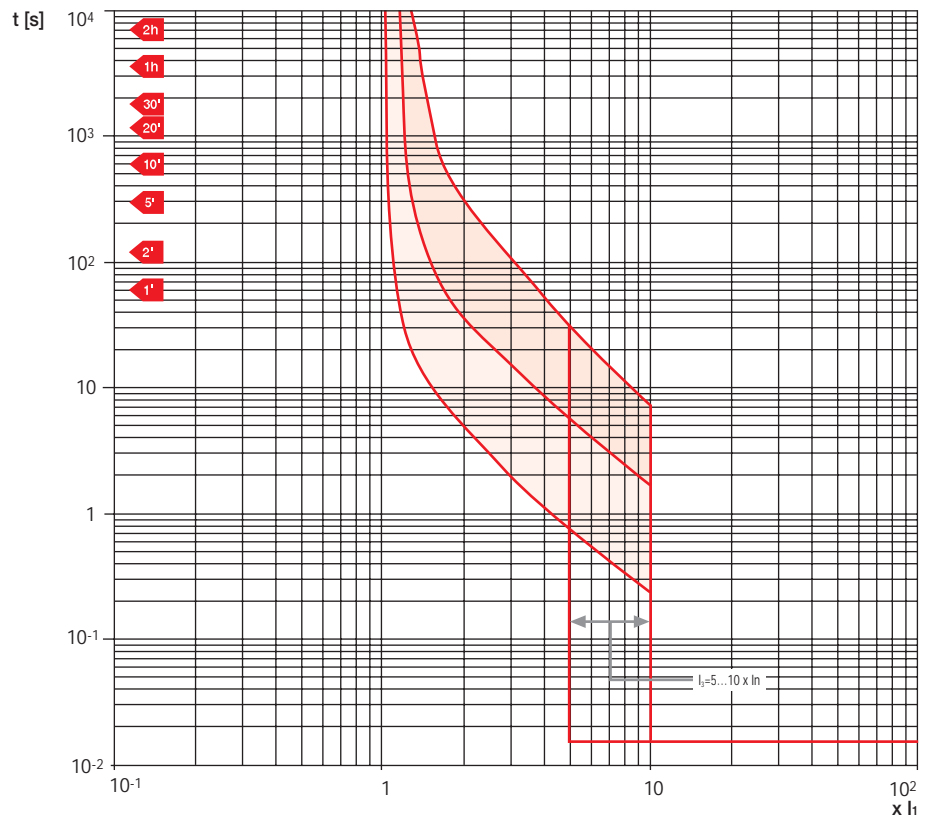


# Trip curves for distribution Circuit breakers w/thermagnetic trip units Tmax T5



## T5 400 TMA

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

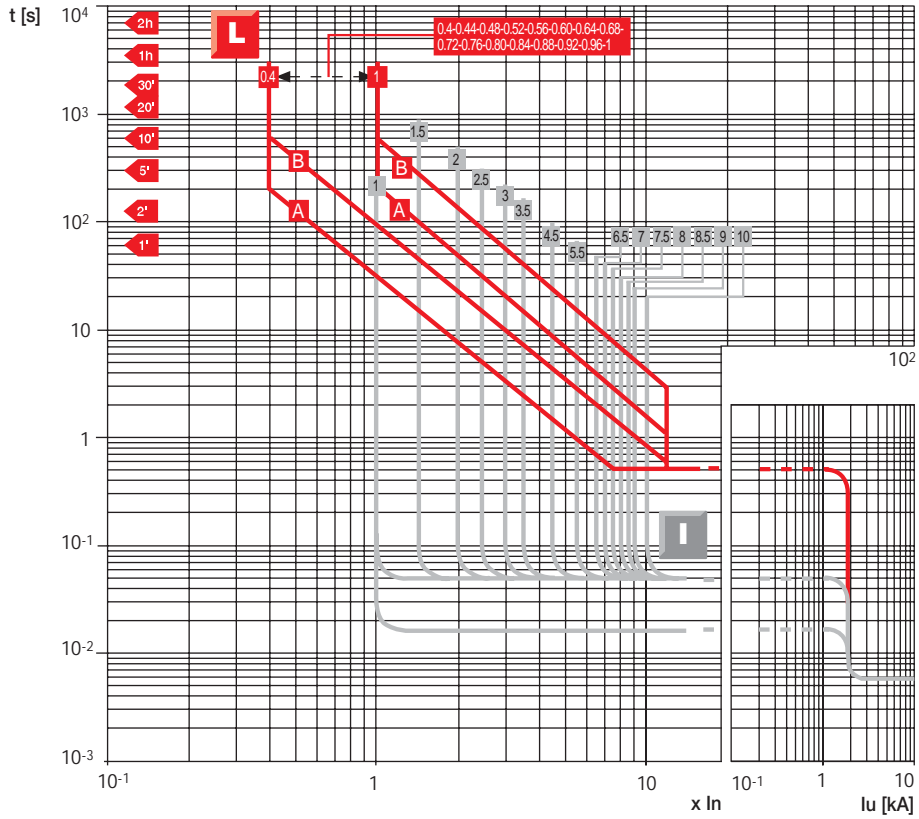




# Trip curves for distribution Circuit breakers w/electronic trip units Tmax T2

T2 100  
PR221DS-LS

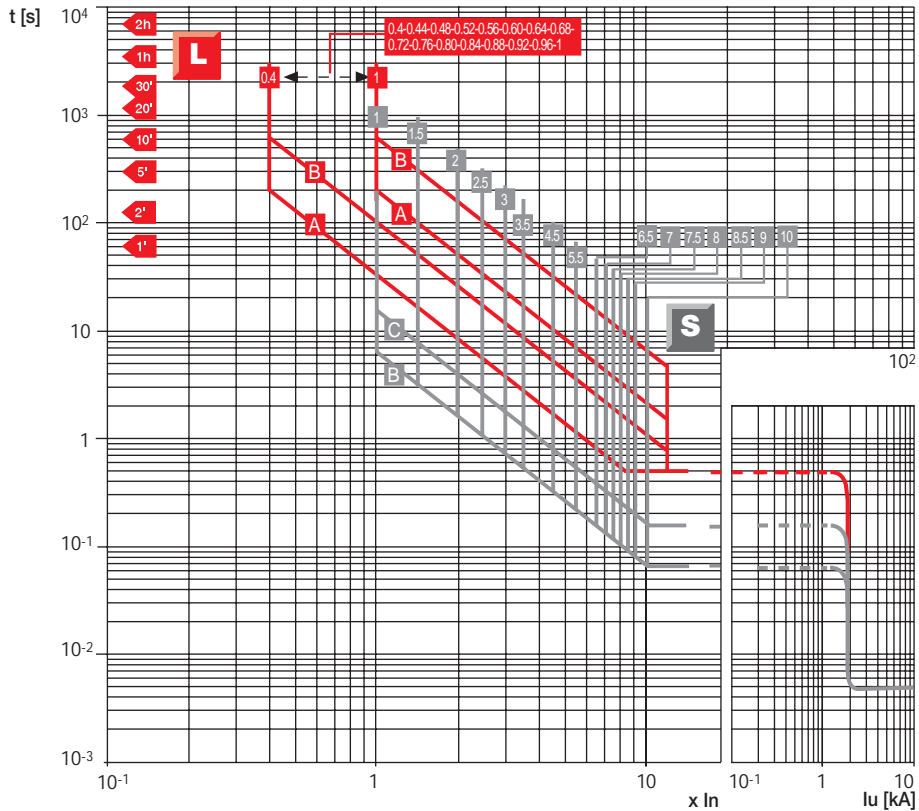
L-I Functions



T2 100  
PR221DS-LS

L-I Functions

15

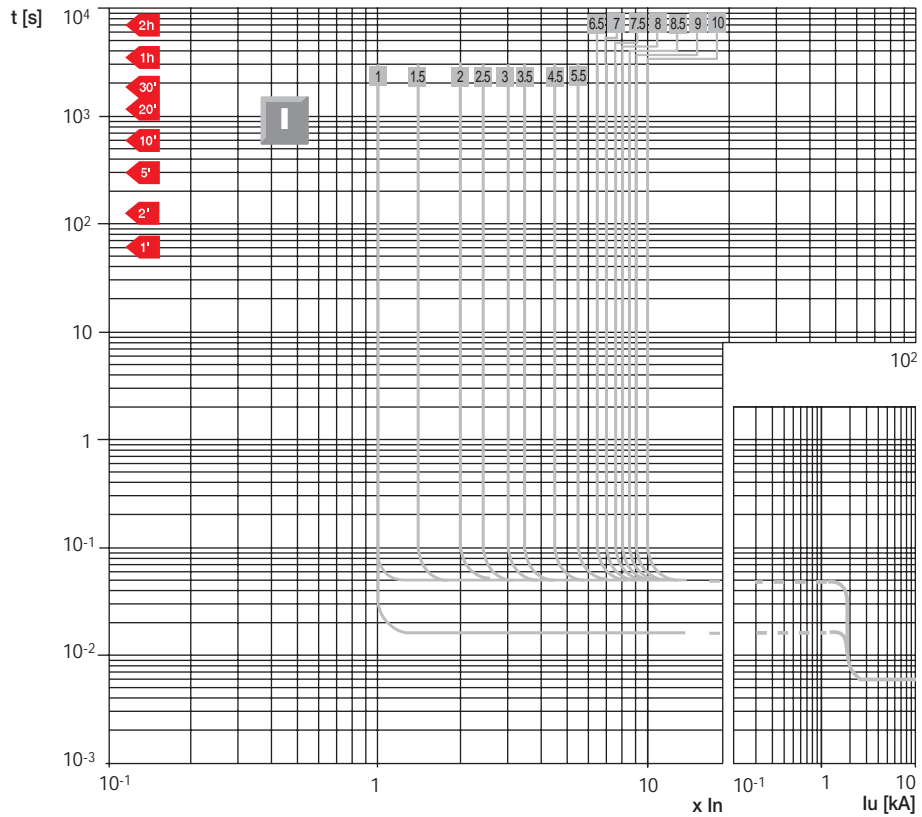


# Trip curves for distribution Circuit breakers w/electronic trip units Tmax T2, T4 & T5



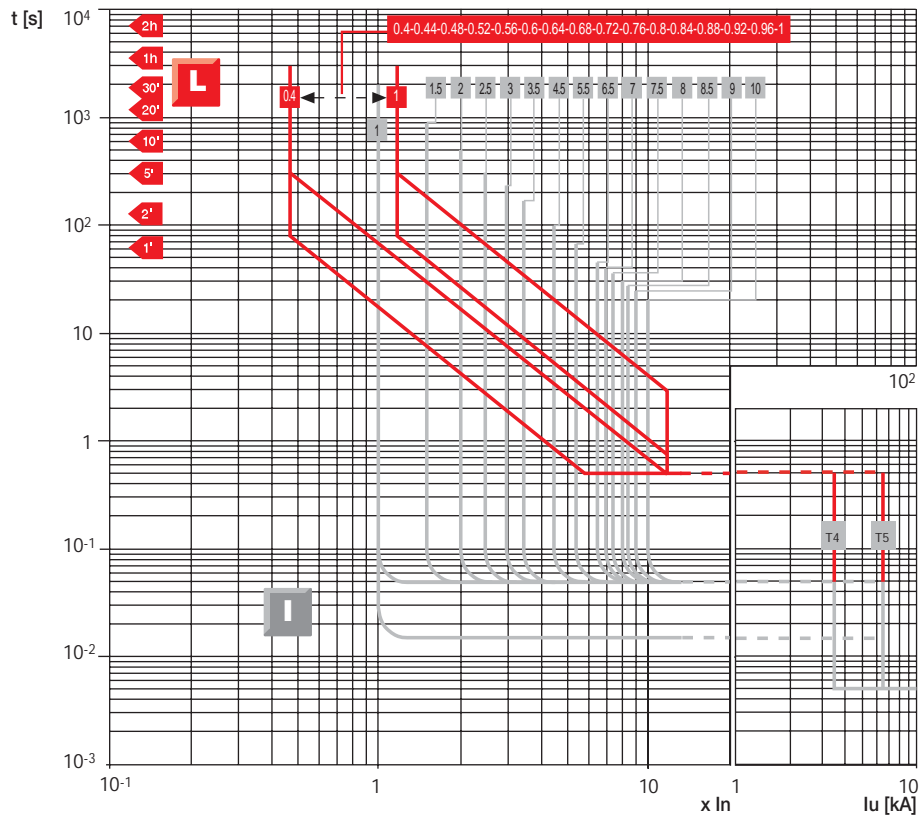
**T2 100  
PR221DS-I**

I Function



**T4 250 - T5 600  
PR221DS**

L-I Functions

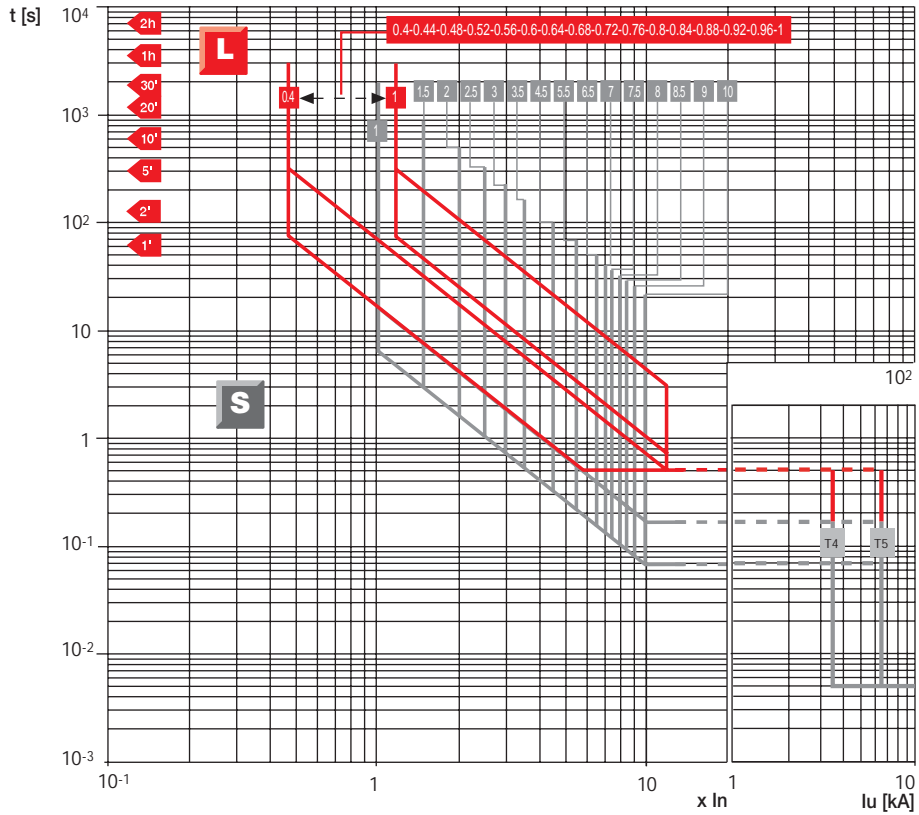




# Trip curves for distribution Circuit breakers w/electronic trip units Tmax T4 & T5

T4 250 - T5 600  
PR221DS

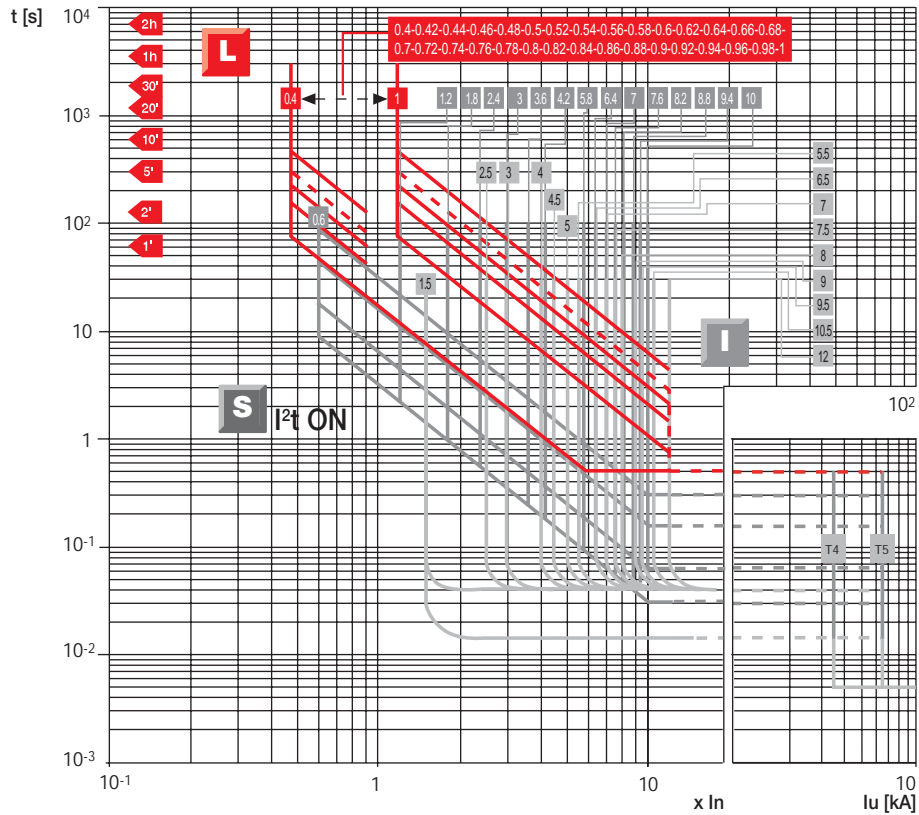
L-S Functions



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

15

L-S-I Functions  
(I<sup>2</sup>t const = ON)

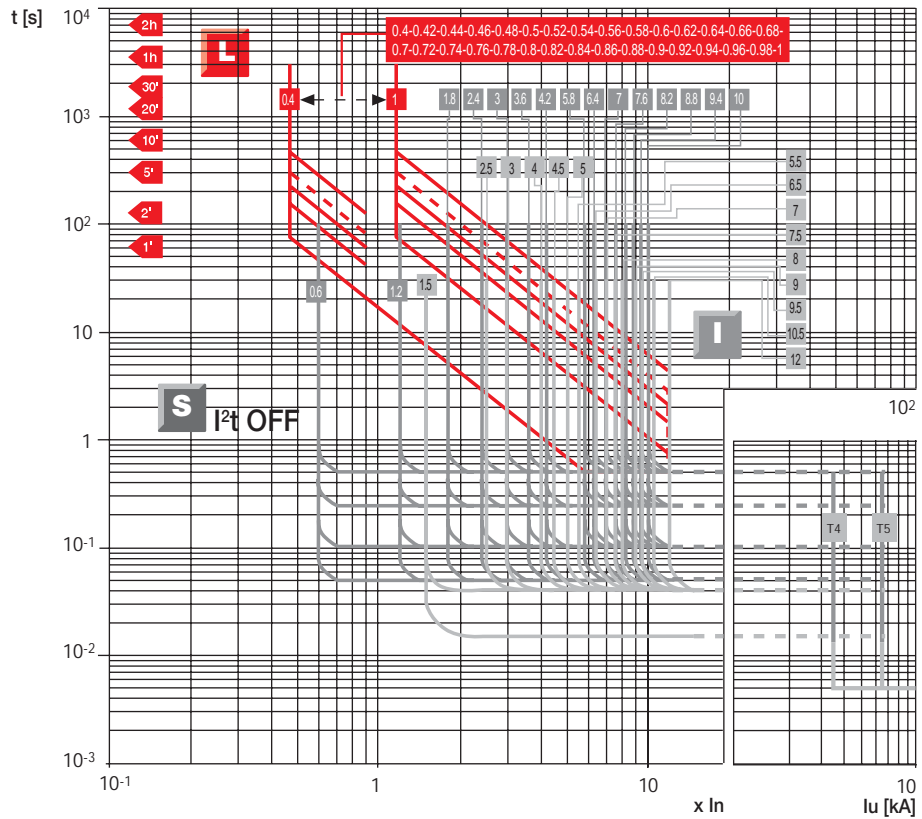


# Trip curves for distribution Circuit breakers w/electronic trip units Tmax T4 & T5



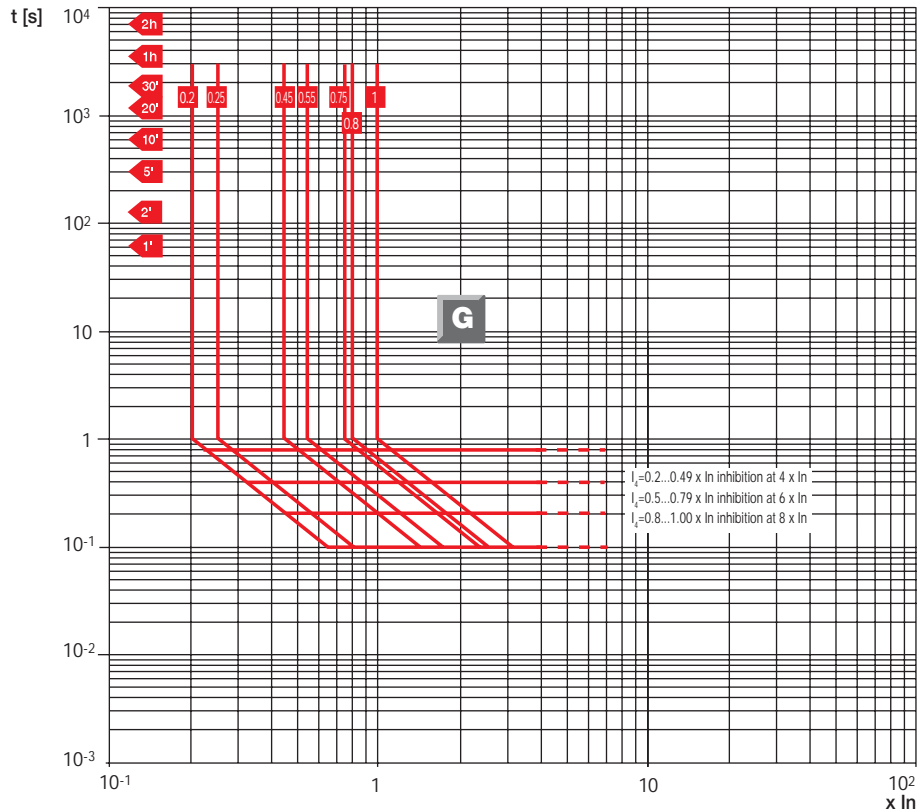
T4 250 - T5 600  
PR222DS/P and  
PR222DS/PD

L-S-I Functions  
(I<sup>2</sup>t const = OFF)



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

G Function





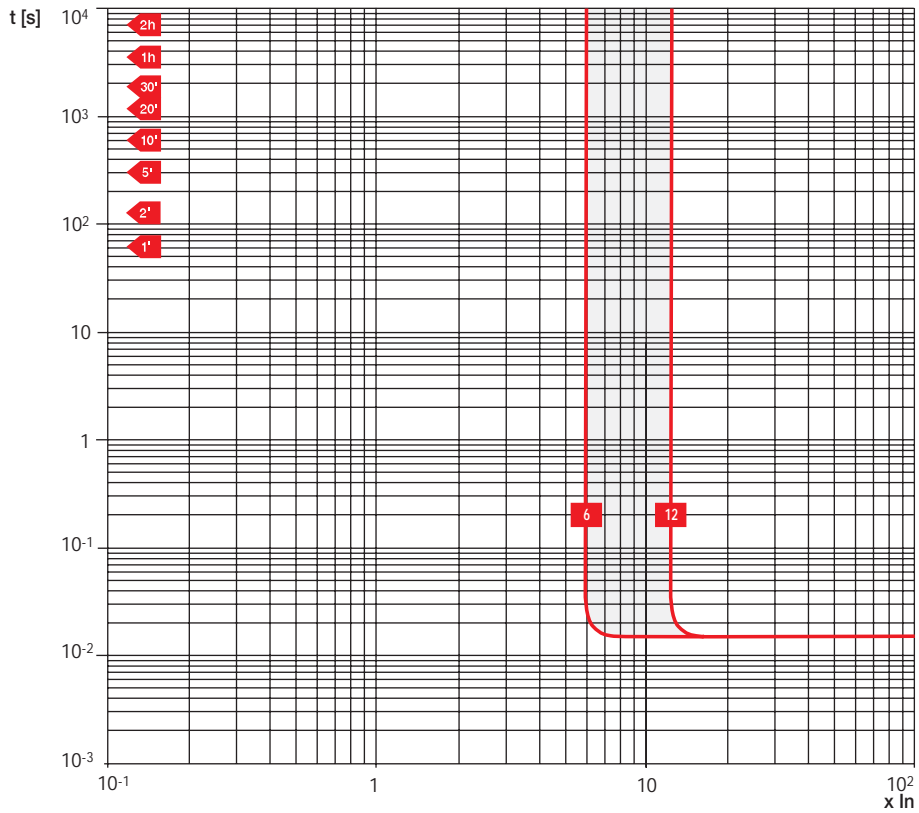
# Trip curves for MCP

## 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

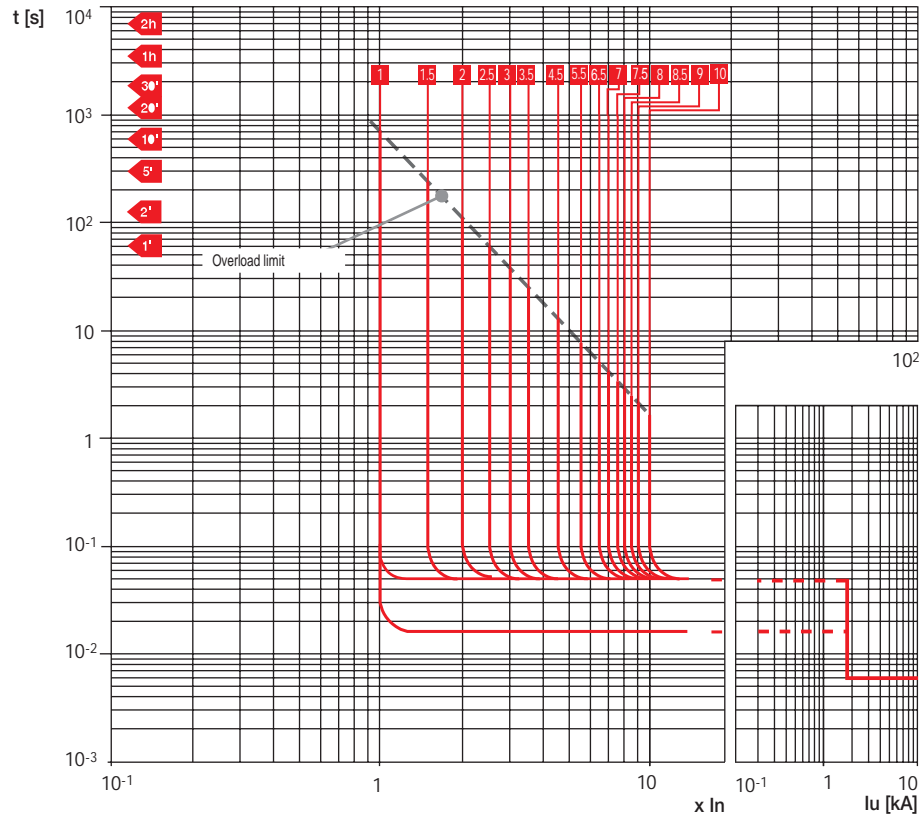
## Circuit breakers w/PR221DS-I electronic trip unit

### Tmax T2, T4 & T5



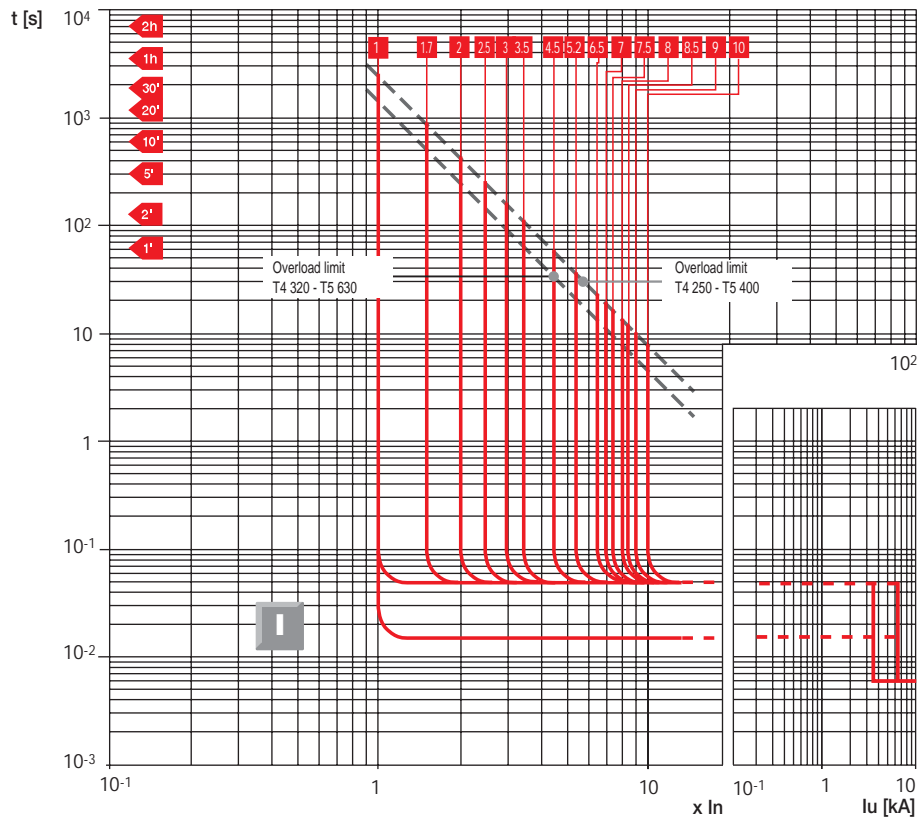
**T2 100**  
**PR221DS-I**

I Function



**T4 250 - T5 600**  
**PR221DS-I**

I Function



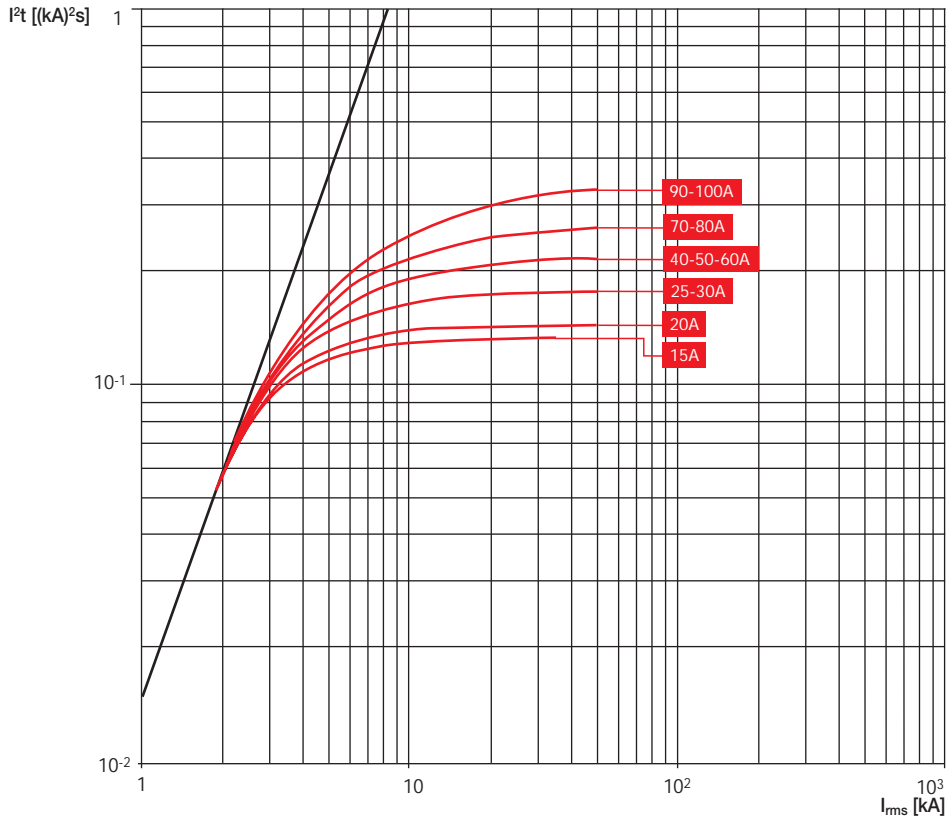


# Specific let-through energy curves

## Tmax T1 & T2, 240V

T1 100

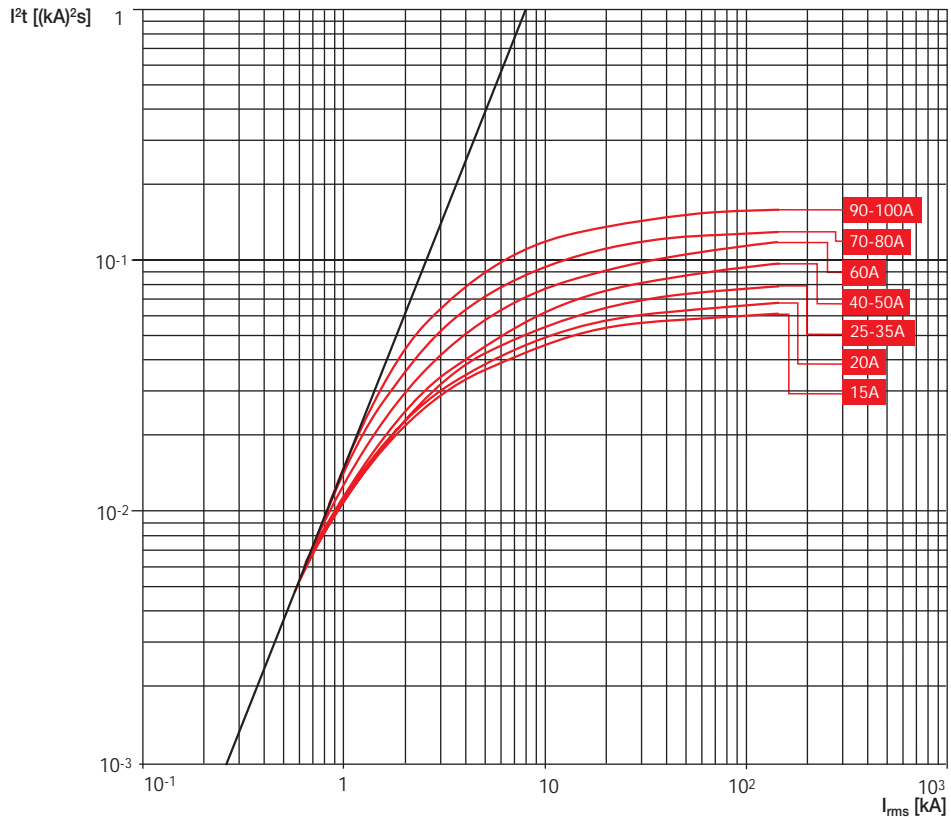
240 V



T2 100

240 V

15



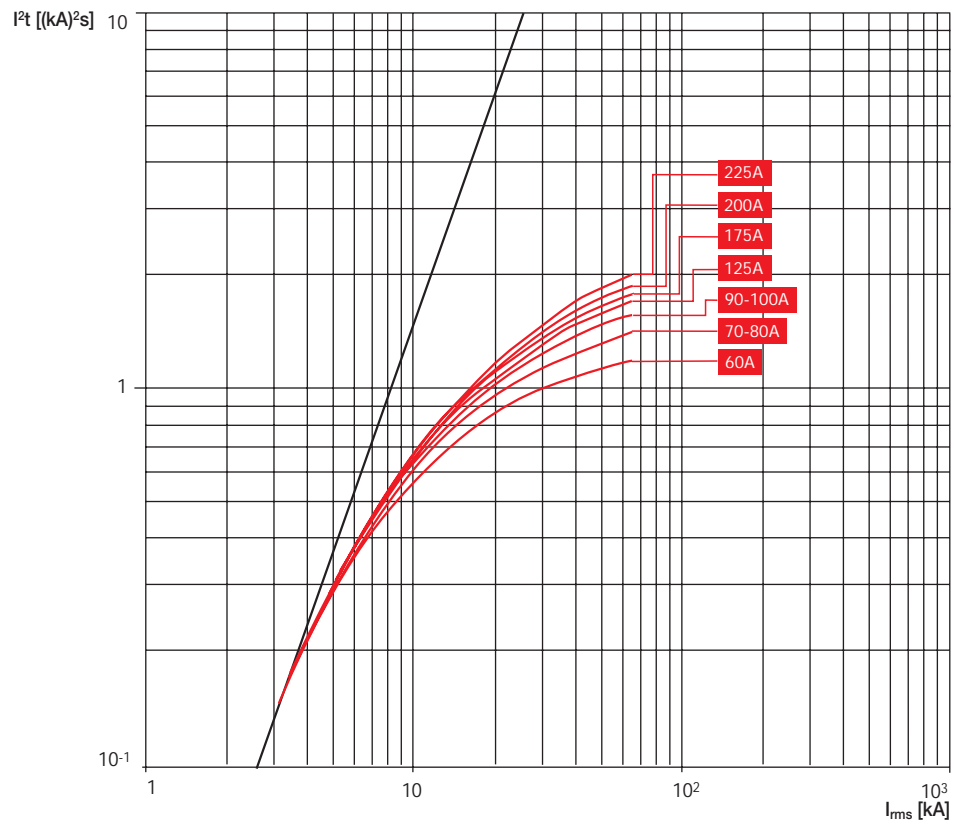
# Specific let-through energy curves

## Tmax T3 & T4, 240V



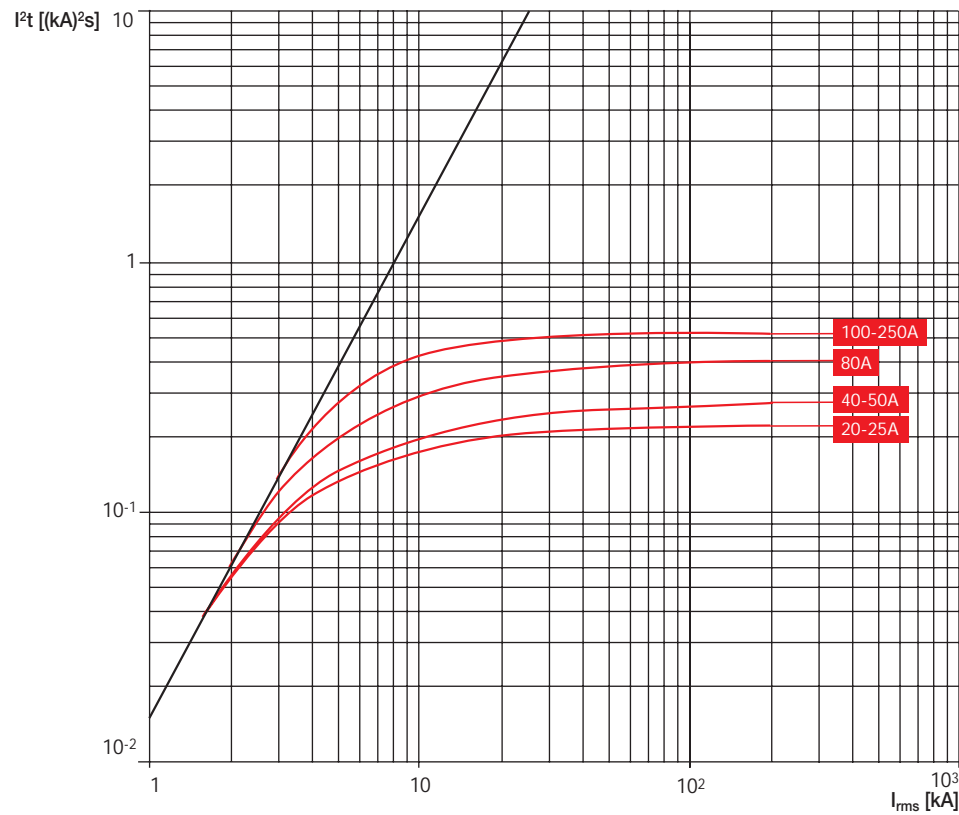
### T3 225

240 V



### T4 250

240 V





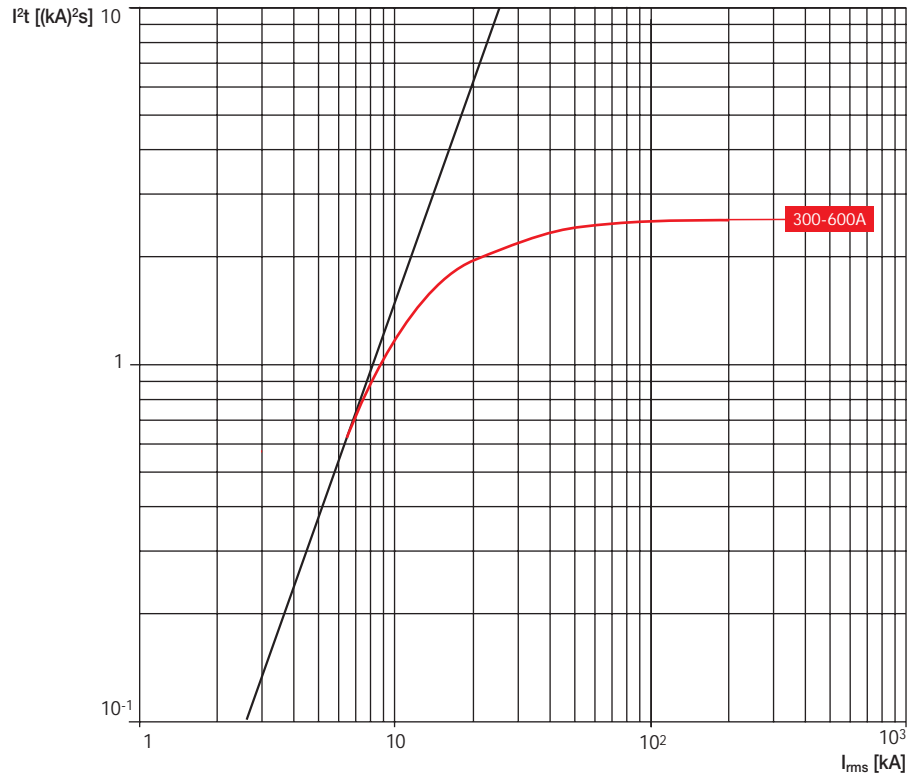
# Specific let-through energy curves

## Tmax T5, 240V

**T5 600**

240 V

\* Please ad ABB for 600 A availability



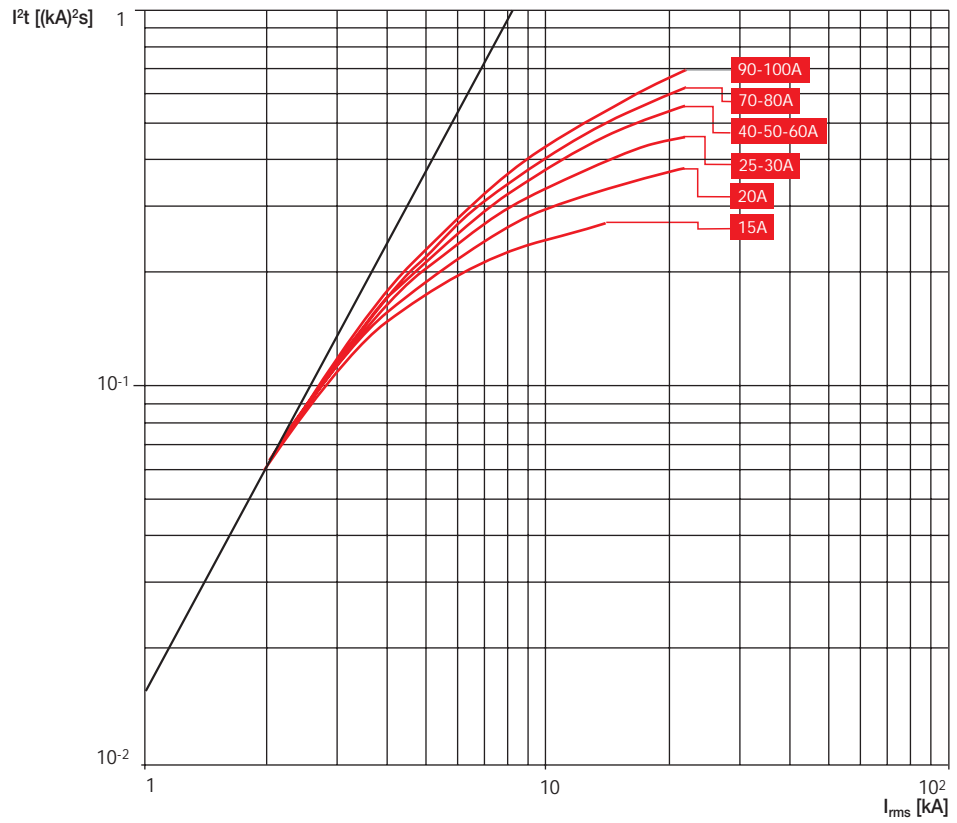
# Specific let-through energy curves

## Tmax T1 & T2, 480V



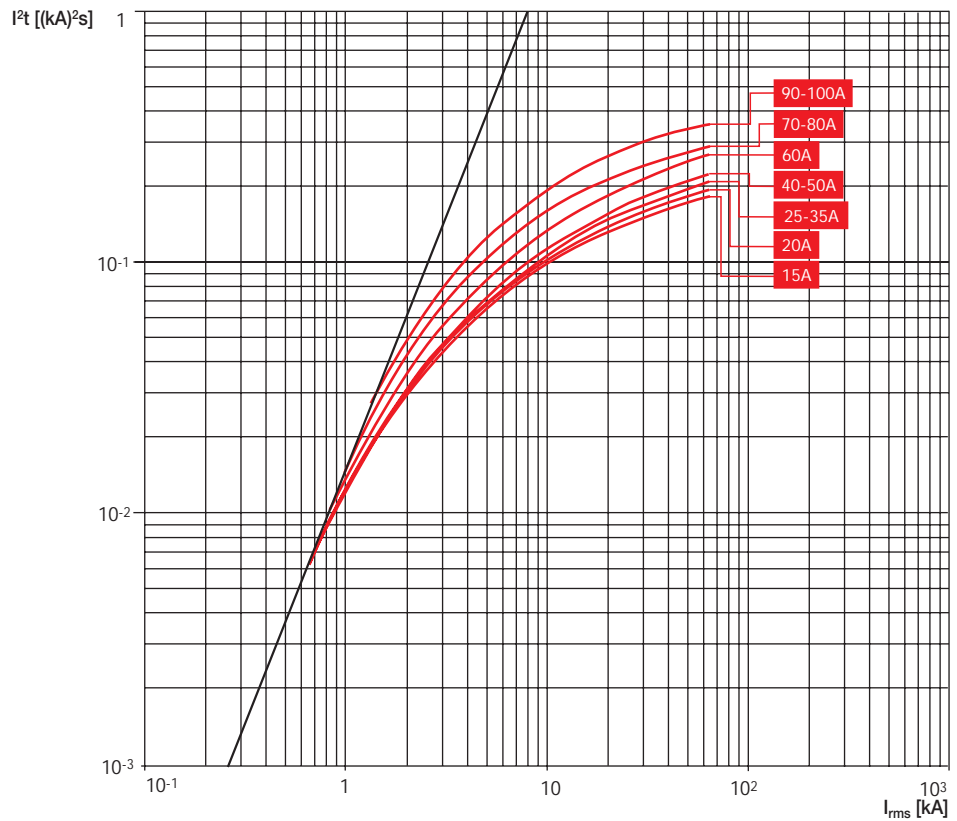
### T1 100

480 V



### T2 100

480 V



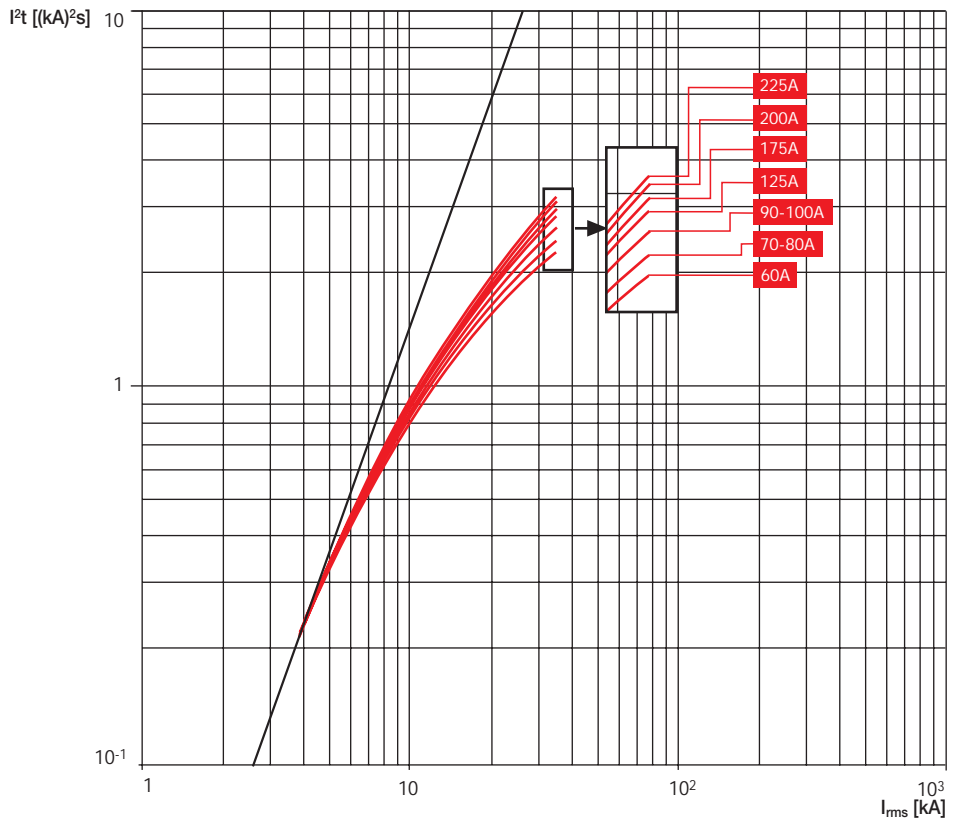


# Specific let-through energy curves

## Tmax T3 & T4, 480V

T3 225

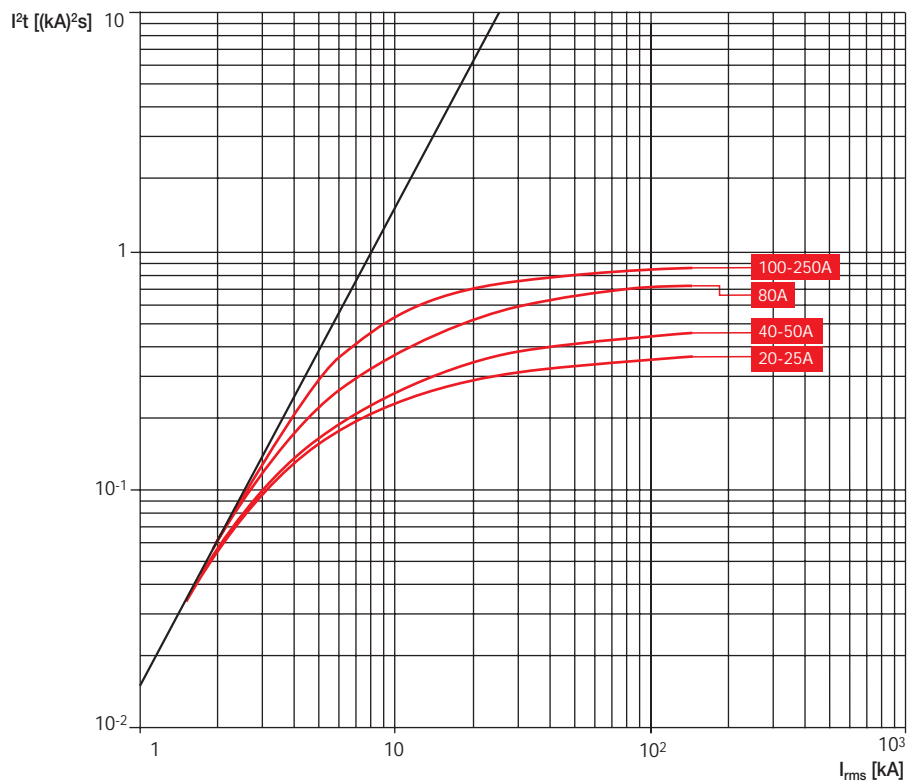
480 V



T4 250

480 V

15



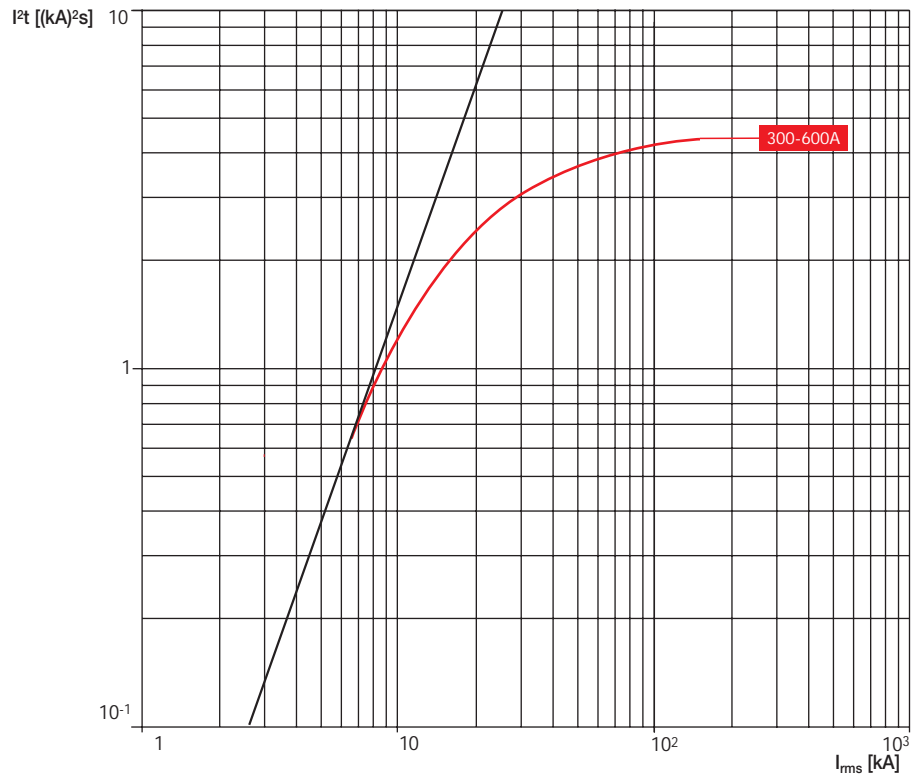
# Specific let-through energy curves

## Tmax T5, 480V



**T5 600**

480 V

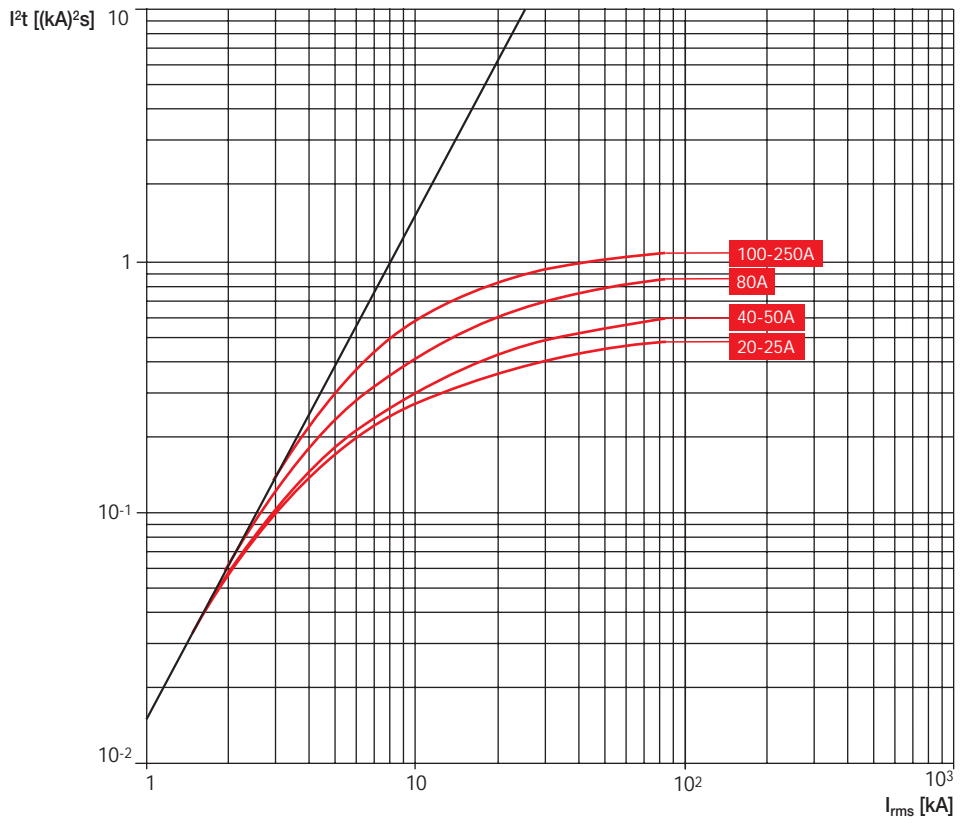




# Specific let-through energy curves Tmax T4 & T5, 600V

T4 250

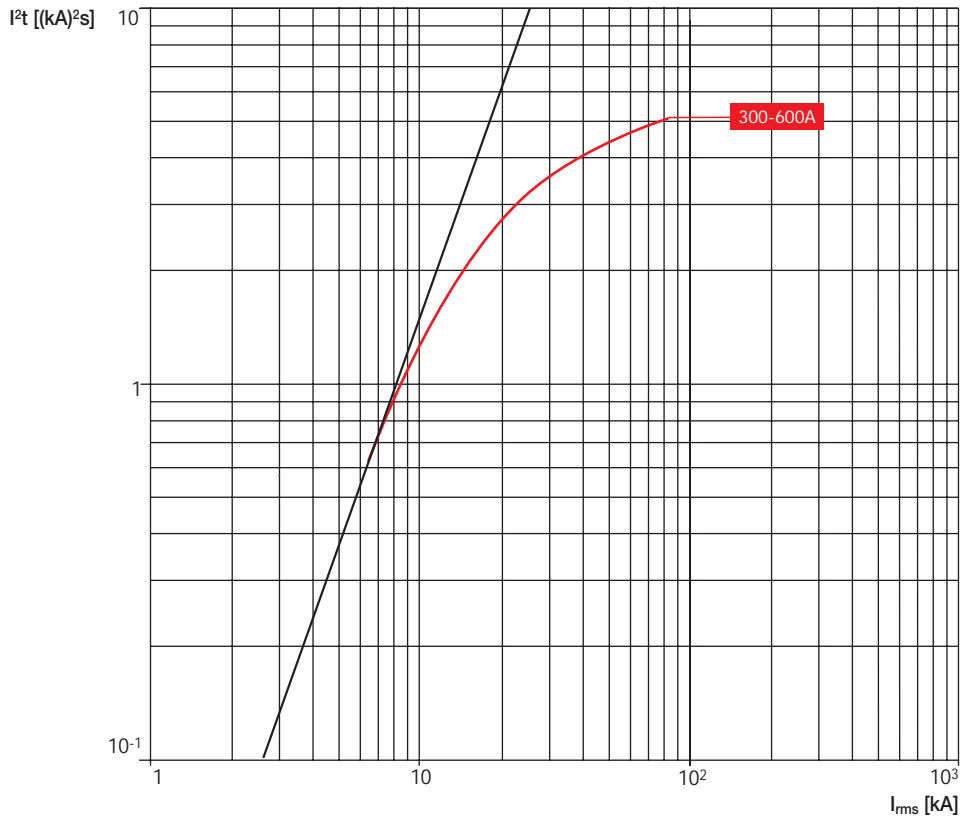
600 V



T5 600

600 V

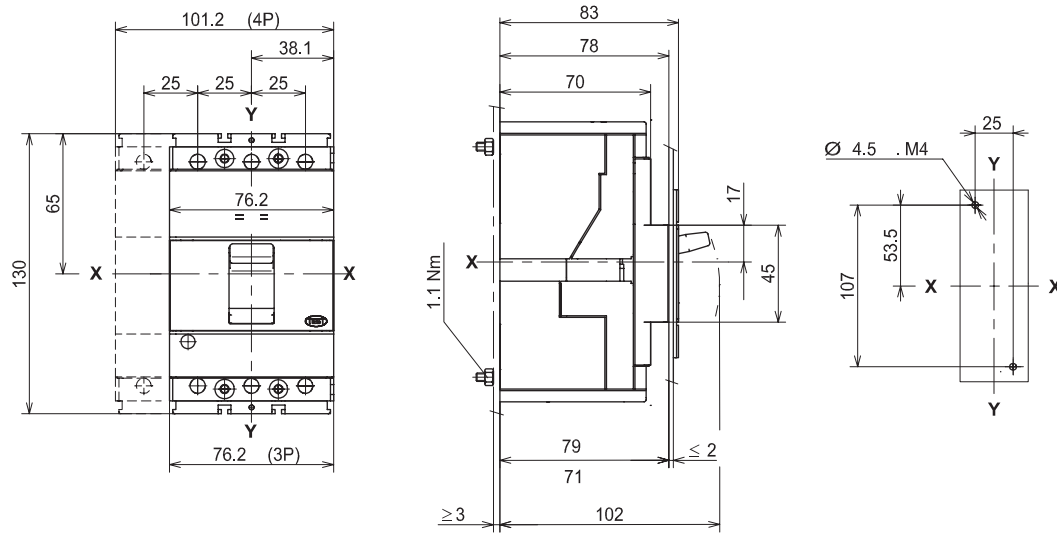
15



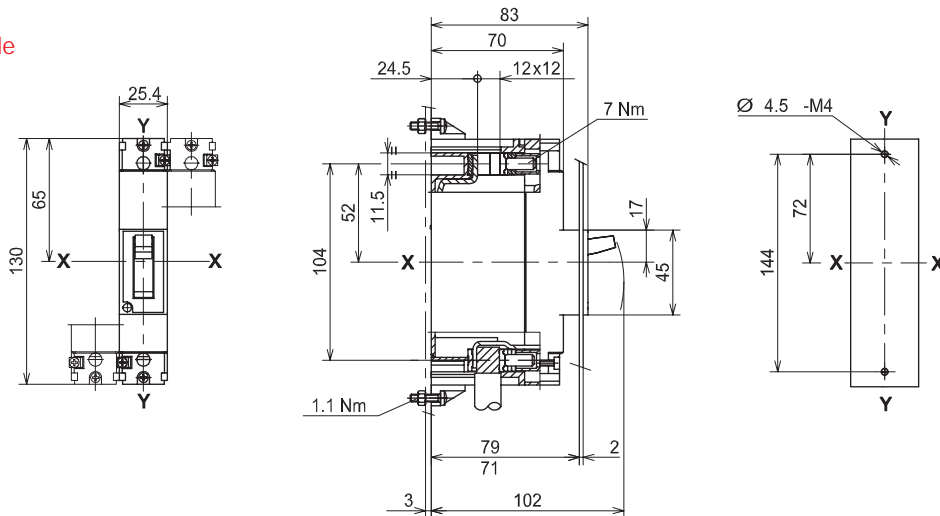
# Approximate dimensions T1 & T2

Tmax  
MCCBs

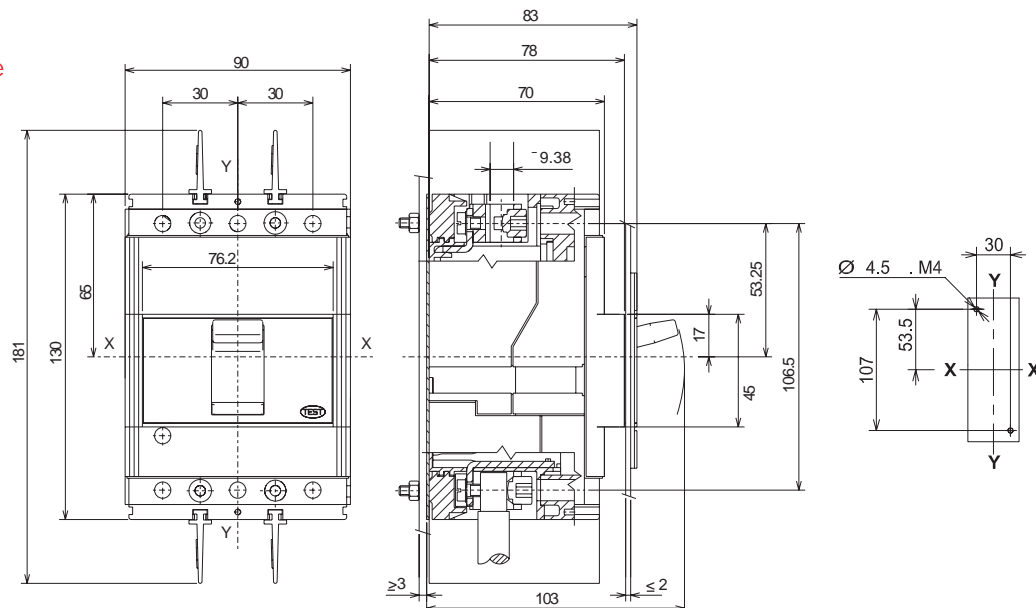
## T1 — 3 pole



## T1 — Single pole



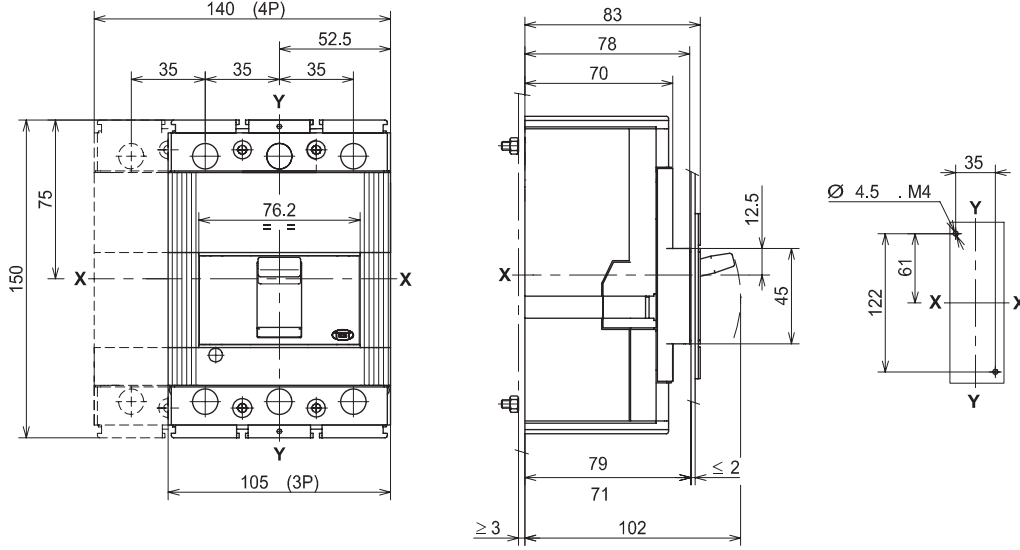
## T2 — 2 & 3 pole



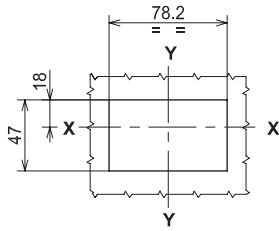


# Approximate dimensions T3

T3 — 2 & 3 pole



Door cut-out for Tmax without faceplate



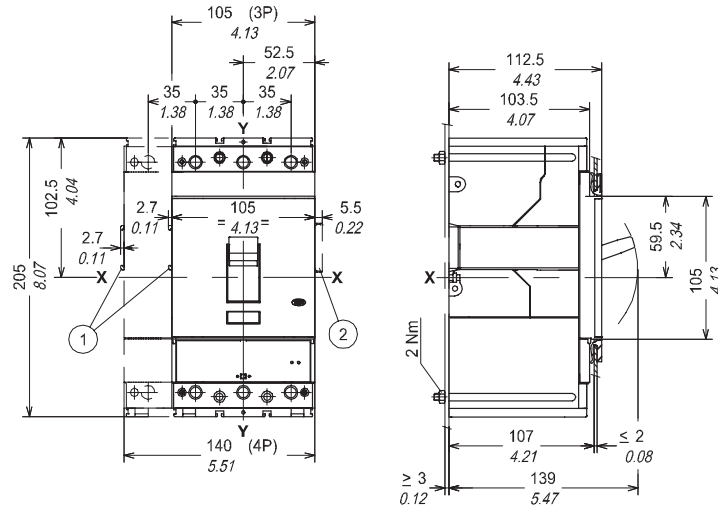
# Approximate dimensions T4

Tmax  
MCCBs

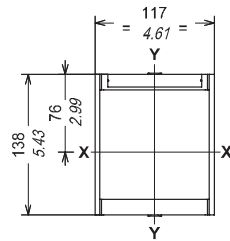
## Fixed circuit breaker

### Caption

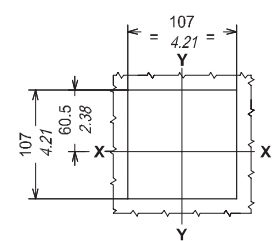
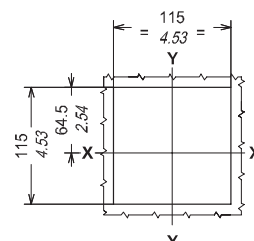
- ① Overall dimensions with cabled accessories mounted (SOR-C, UVR-C, RC221-222)
- ② Overall dimensions with cabled auxiliary contacts mounted (only 3Q 1SY)



### Flange for compartment door



### Drilling templates of the compartment door

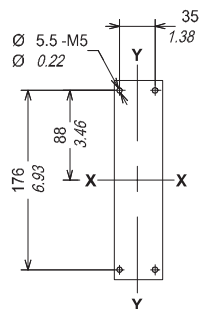


3-4 POLES  
With flange

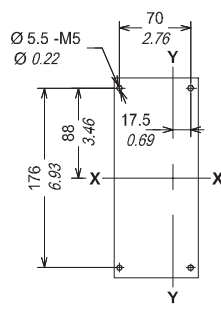
3-4 POLES  
Without flange

### Drilling templates for support sheet

For front terminals

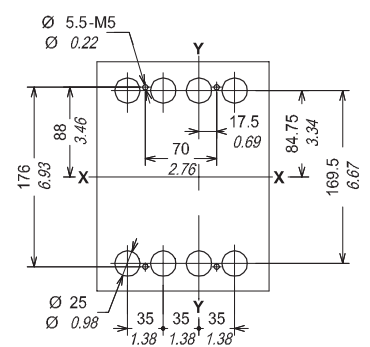
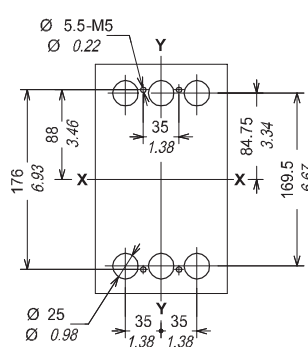


3 POLES



4 POLES

For rear terminals

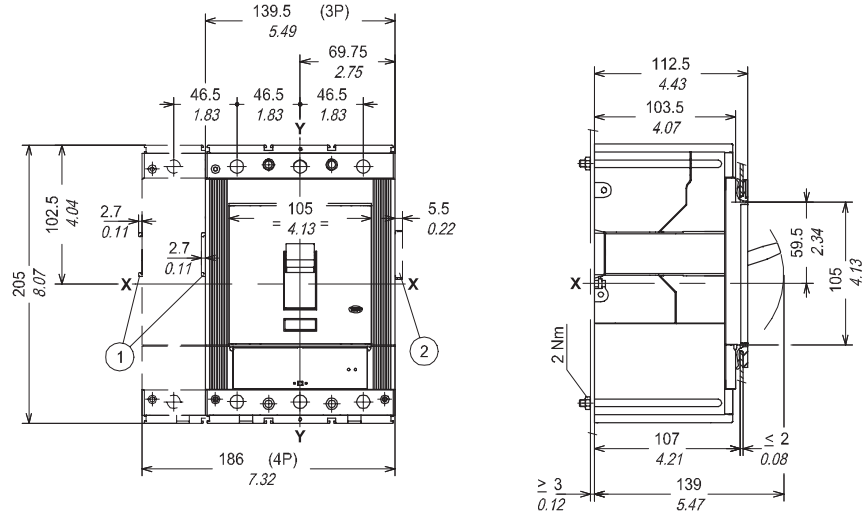


## Fixed circuit breaker

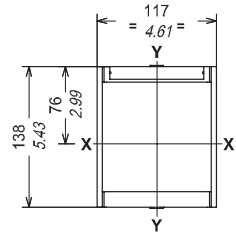
### Fixing on sheet

Caption

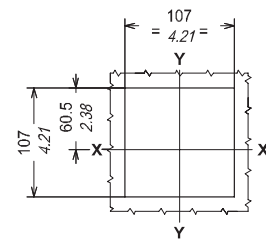
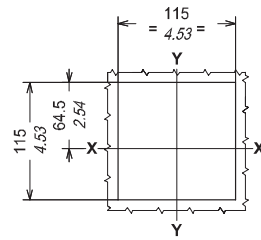
- ① Overall dimensions with cabled accessories mounted (SOR-C, UVR-C, RC221-222)
- ② Overall dimensions with cabled auxiliary contacts mounted (only 3Q 1SY)



### Flange for compartment door



### Drilling templates of the compartment door

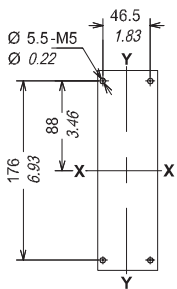


With flange (3-4 POLES)

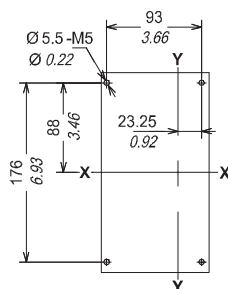
Without flange (3-4 POLES)

### Drilling templates for support sheet

#### For front terminals

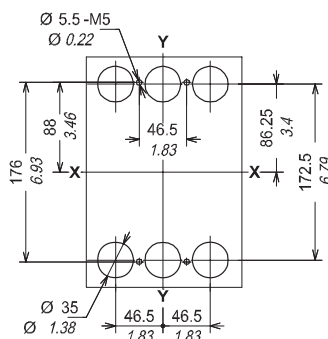


3 POLES

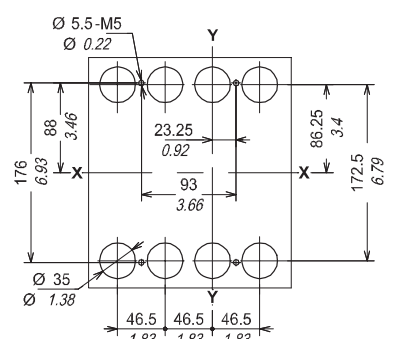


4 POLES

#### For rear terminals



3 POLES



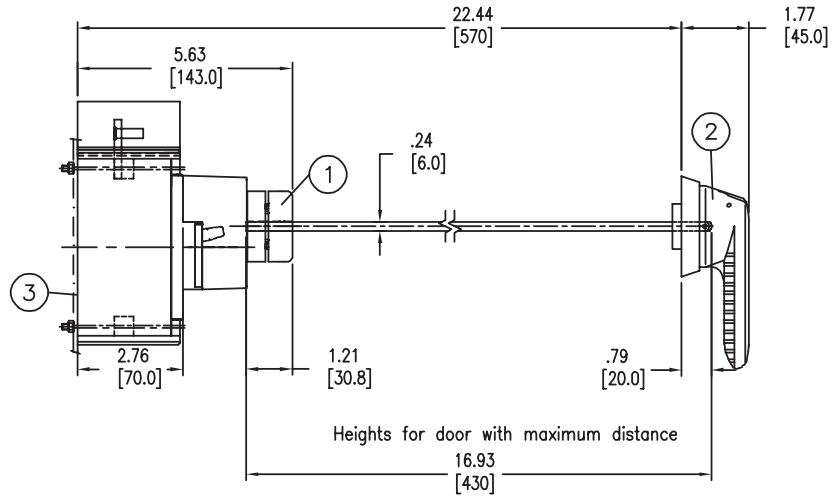
4 POLES

# Approximate dimensions

## T1 - T3 variable depth mechanism with OHB handle

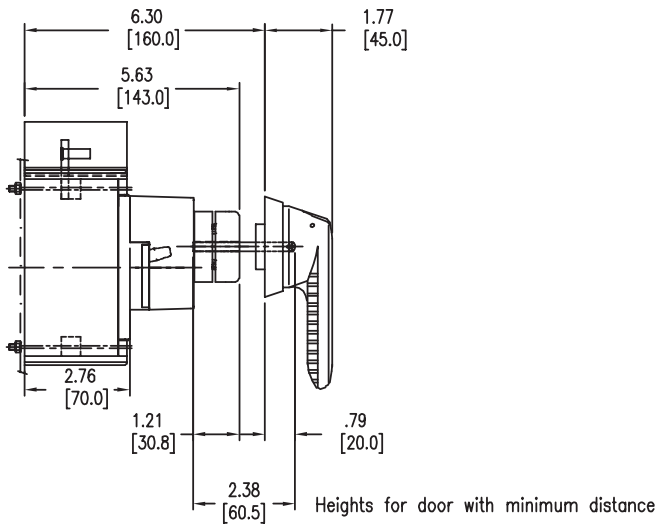


Pistol handle operating mechanism on the compartment door

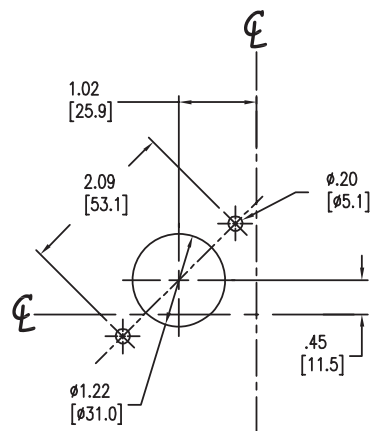


Caption

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

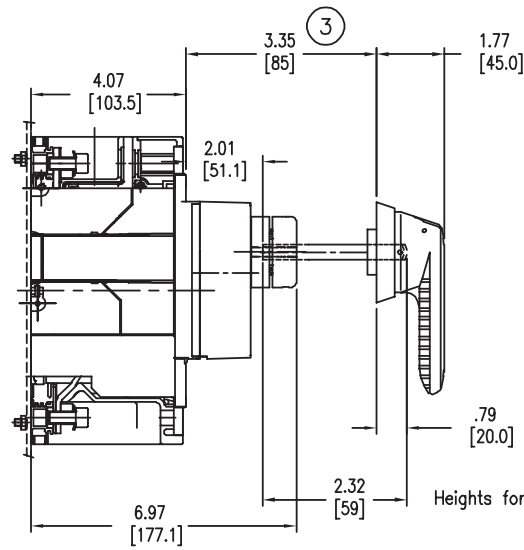
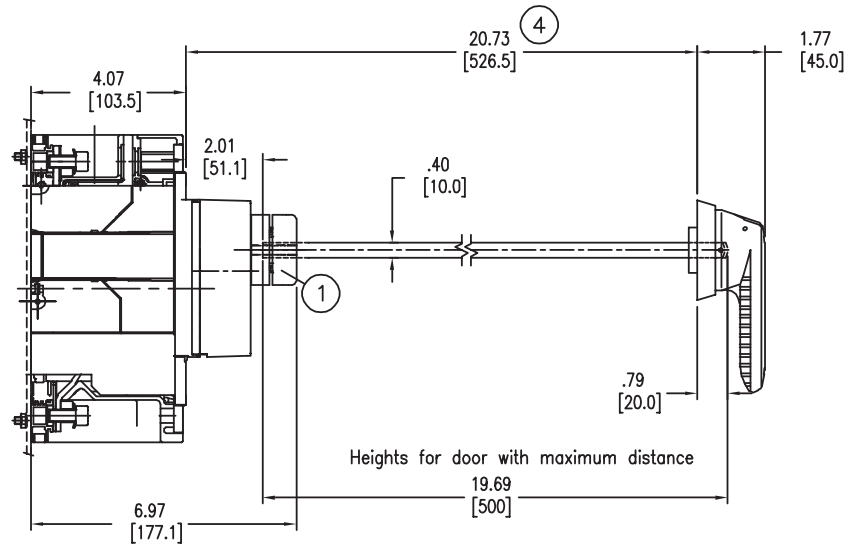


Drilling template of the compartment door



## Approximate dimensions T4 - T5 variable depth mechanism with OHB handle

Pistol handle operating mechanism on the compartment door

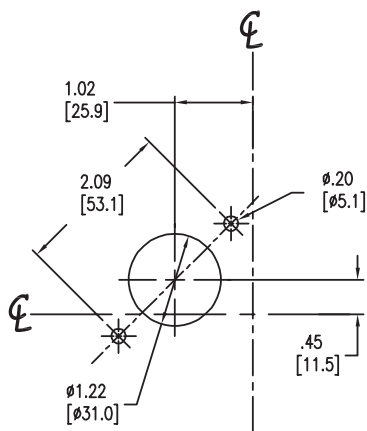


Note:  
Minimum distance from hinge of enclosure door to center of shaft is 7.87 in. [200mm]

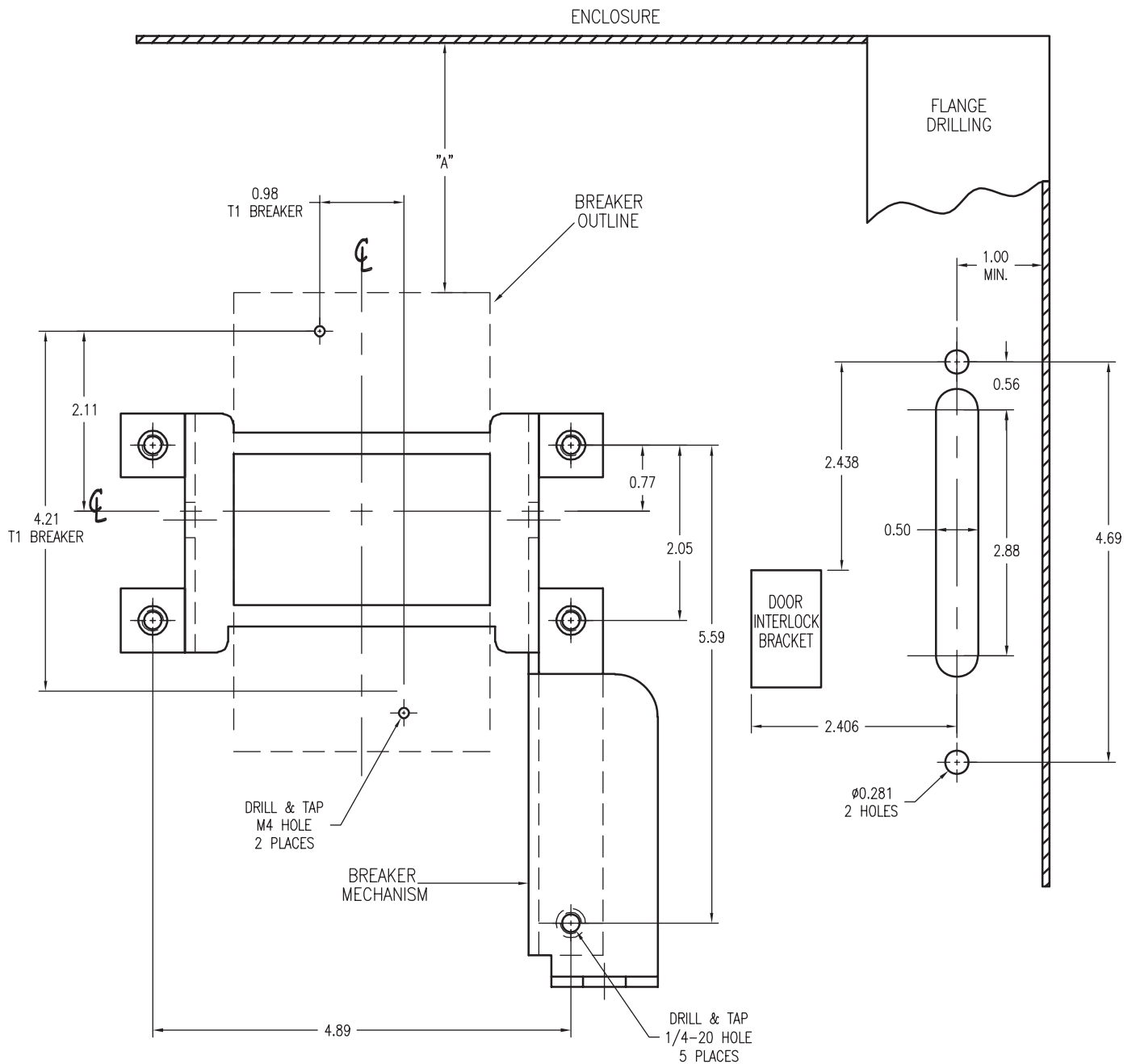
Caption

- 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



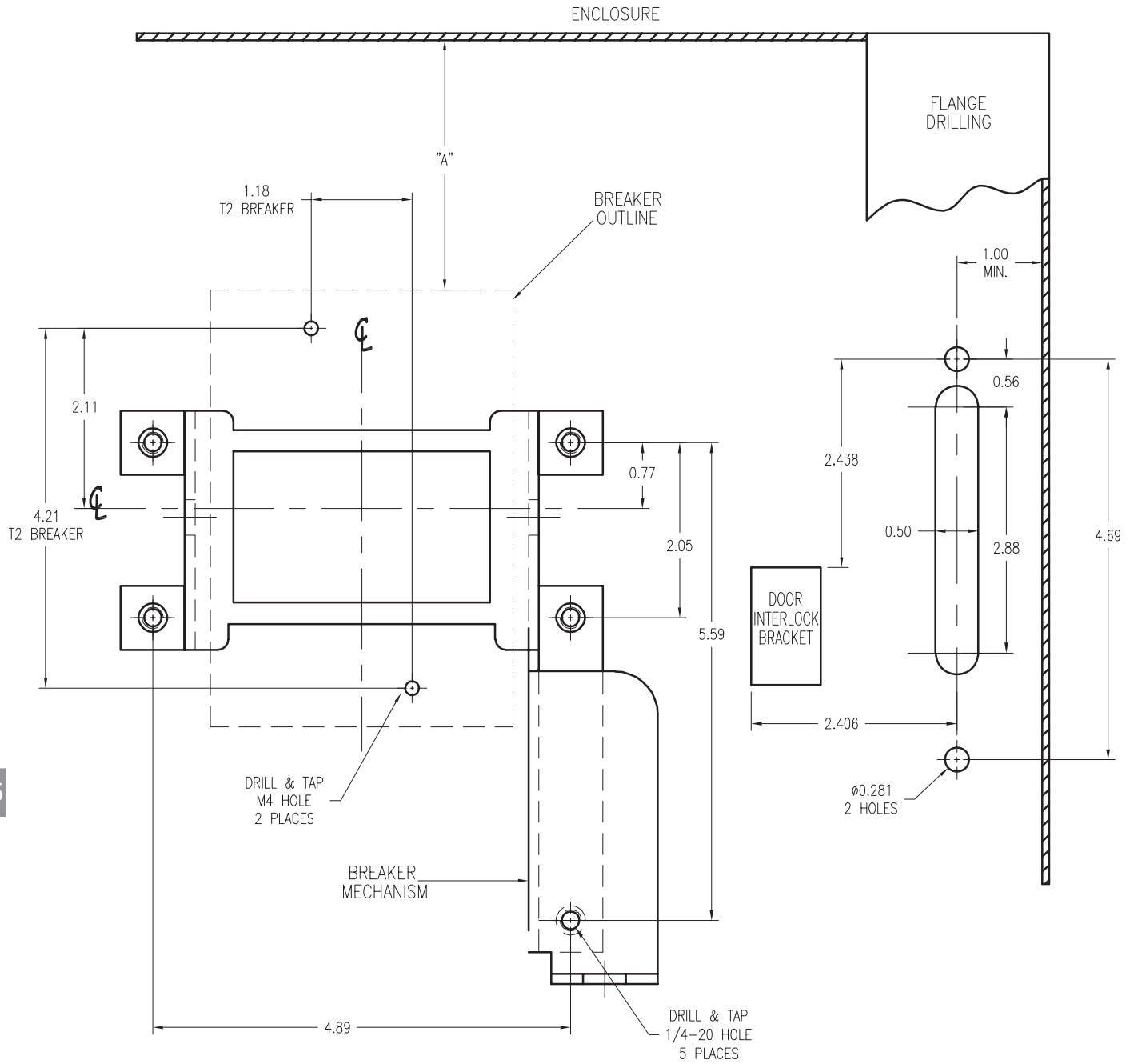
# Approximate dimensions T1 Flange handle, cable operated



**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.

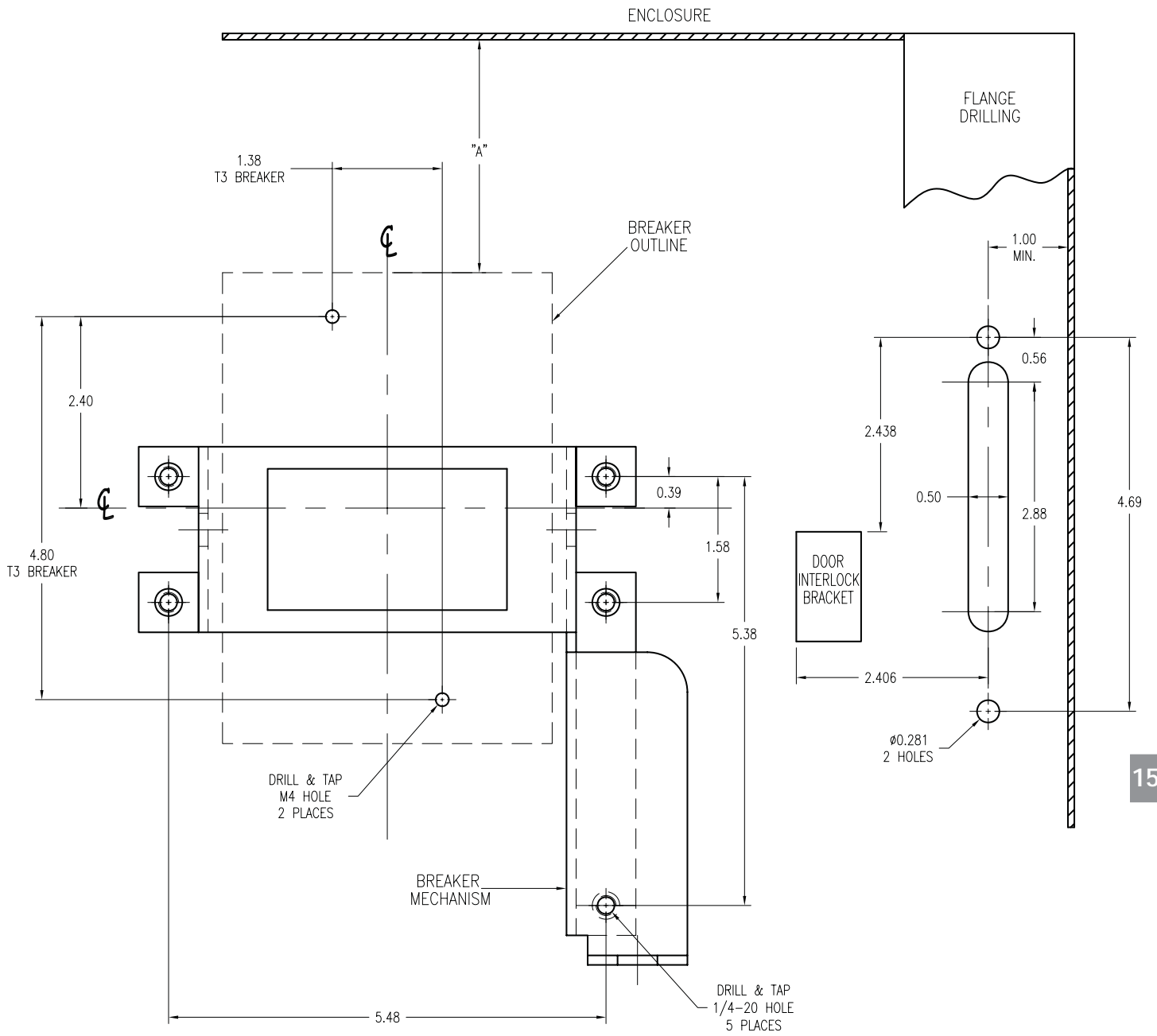
## Approximate dimensions T2 Flange handle, cable operated



**NOTES:**

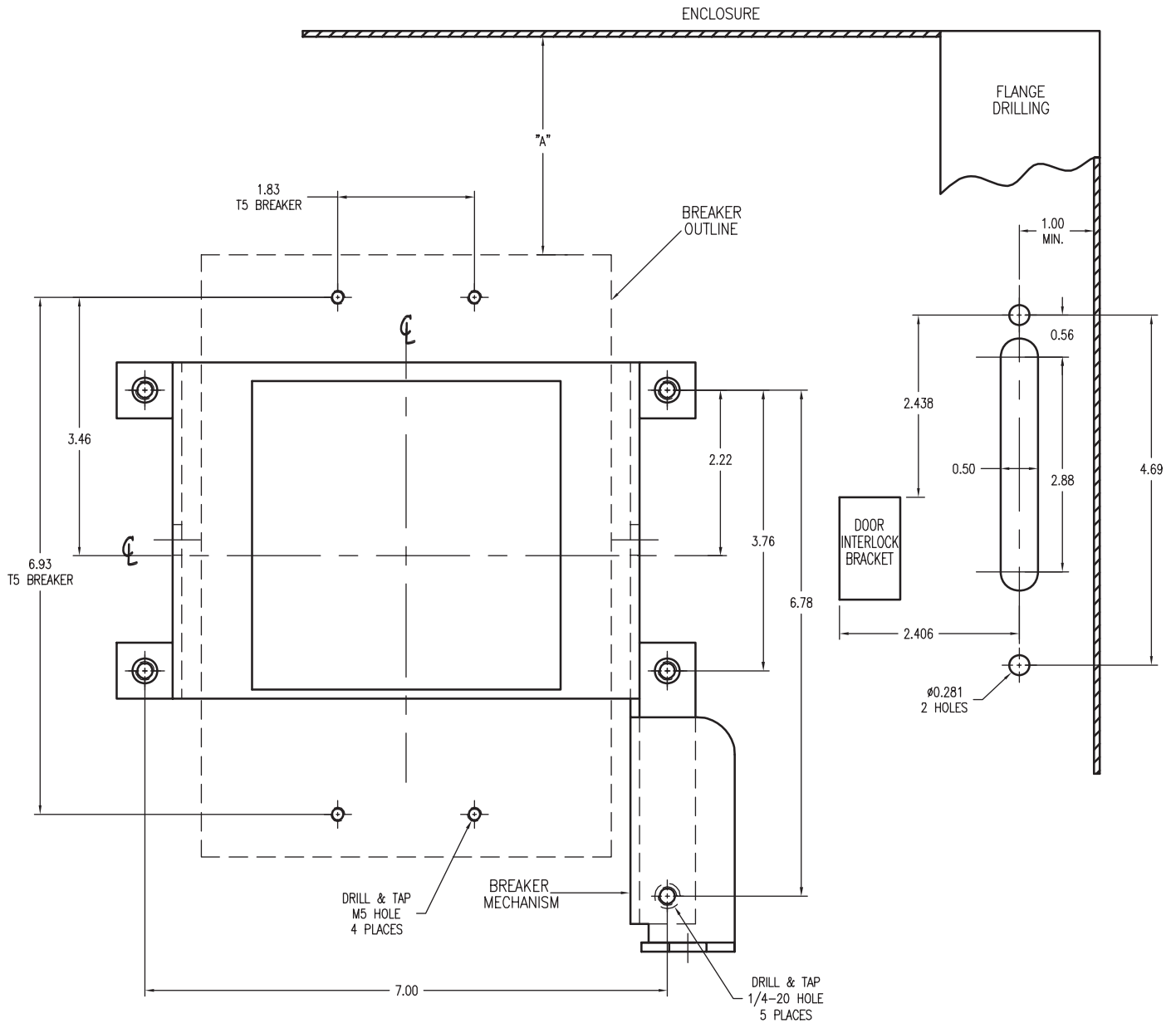
1. "A" DIM. IS THE WIRING BENDING SPACE AS REQUIRED BY THE NATIONAL ELECTRIC CODE.
2. THE MINIMUM BEND RADIUS OF THE CABLE IS 3 INCHES.

# Approximate dimensions T3 Flange handle, cable operated





# Approximate dimensions T5 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.



## Notes