

Megatiker M3 250 thermal magnetic with earth leakage circuit breakers and MS3 250 switch disconnectors with earth leakage

Reference(s) :

T734F16D; T734F20D; T734F25D; T734F32D; T734F40D; T734F50D; T734F63D; T734F80D; T734F100D; T734F125D; T734F160D; T734F200D; T734F250D; T734N16D; T734N20D; T734N25D; T734N32D; T734N40D; T734N50D; T734N63D; T734N80D; T734N100D; T734N125D; T734N160D; T734N200D; T734N250D; T734S250D



CONTENTS	PAGES
1. USE	1
2. RANGE	1
3. DIMENSIONS AND WEIGHTS	1
4. OVERVIEW	4
5. ELECTRICAL CONNECTIONS	4
6. ELECTRICAL AND MECHANICAL CHARACTERISTICS	6
7. CONFORMITY	8
8. EQUIPMENTS AND ACCESSORIES	9
9. CURVES	12

1. USE

Megatiker platform, for premium segment, is able to cover extended ranges in terms of breaking capacities and rated currents, make protection suitable for different levels of power involved in installations. Megatiker platform provide easy assembly procedures during the phase of installation and mounting of accessories, suitable for professional use.

2. RANGE

Circuit breakers

Megatiker M3 250 + earth leakage		
	36 kA	50 kA
I _n (A)	4P	
16	T734F16D	T734N16D
20	T734F20D	T734N20D
25	T734F25D	T734N25D
32	T734F32D	T734N32D
40	T734F40D	T734N40D
50	T734F50D	T734N50D
63	T734F63D	T734N63D
80	T734F80D	T734N80D
100	T734F100D	T734N100D
125	T734F125D	T734N125D
160	T734F160D	T734N160D
200	T734F200D	T734N200D
250	T734F250D	T734N250D

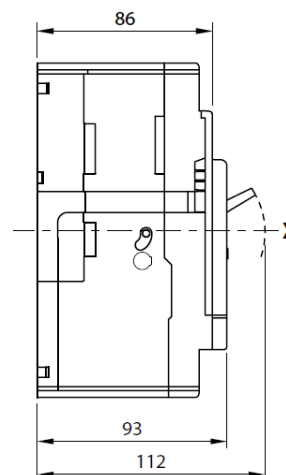
Switch disconnectors

Megatiker MS3 250 + earth leakage	
I _n (A)	4P
250	T734S250D

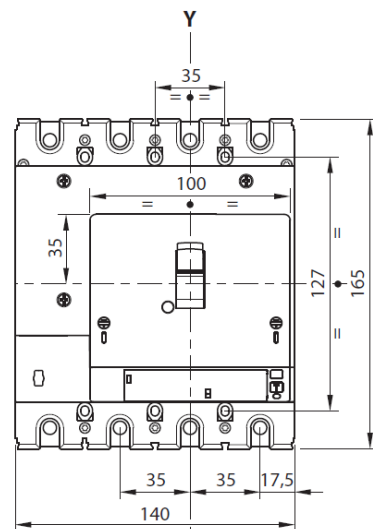
3. DIMENSIONS AND WEIGHTS

3.1 Dimensions

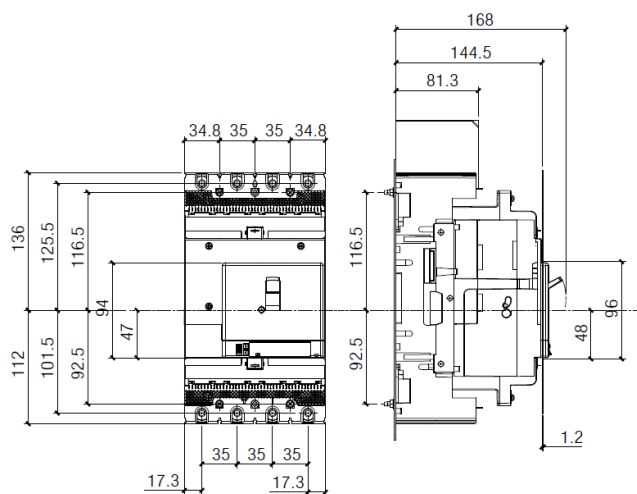
Lateral view



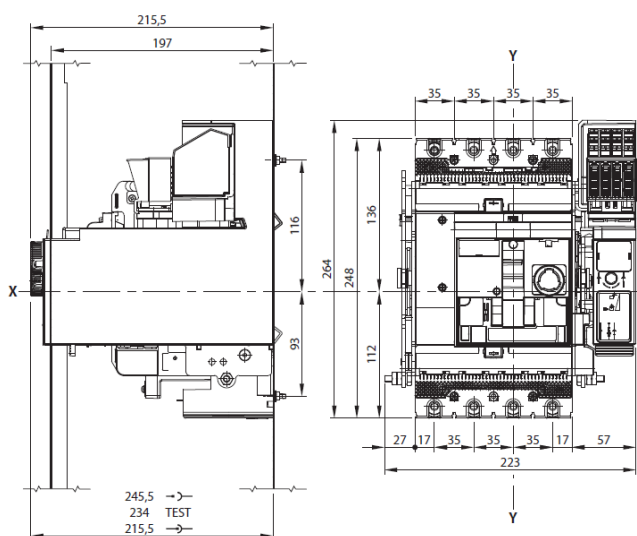
Frontal view



Plug-in version

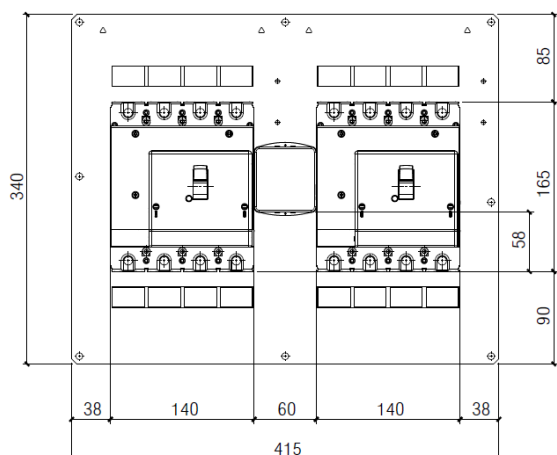


Draw-out version



Interlock

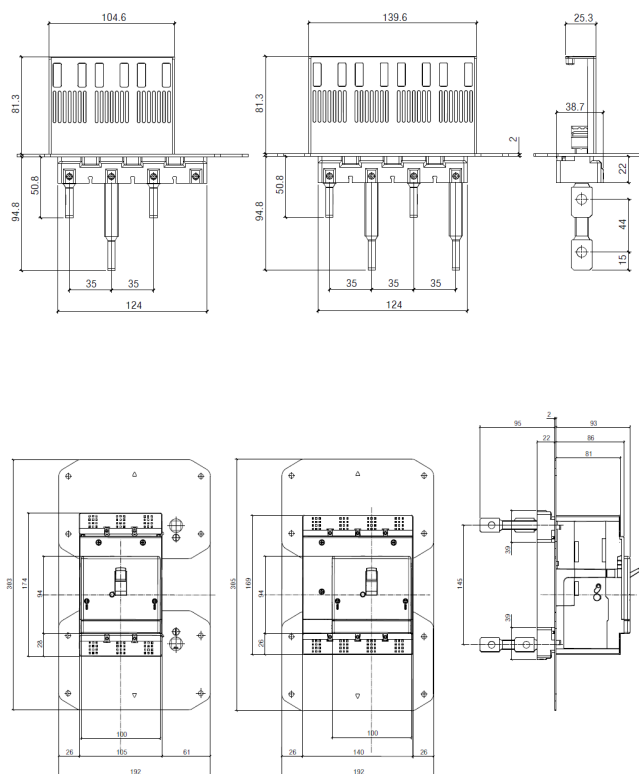
(for rear plate interlock dimension, see relative instruction sheet)



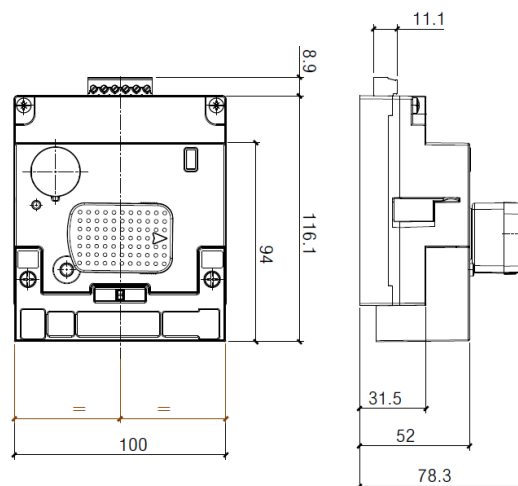
Reference(s) :

T734F16D;T734F20D;T734F25D;T734F32D;T734F40D;T734F50D;T734F63D;
T734F80D; T734F100D;T734F125D;T734F160D;T734F200D;T734F250D;
T734N16D;T734N20D;T734N25D;T734N32D;T734N40D;T734N50D;
T734N63D;T734N80D;T734N100D;T734N125D;T734N160D;734N200D;
T734N250D; T734S250D

Rear terminals



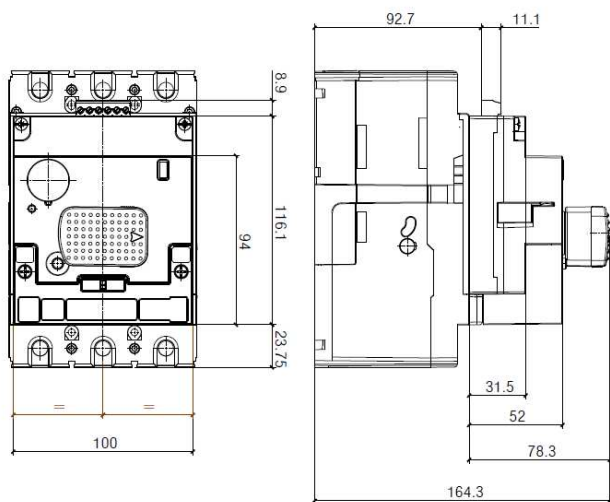
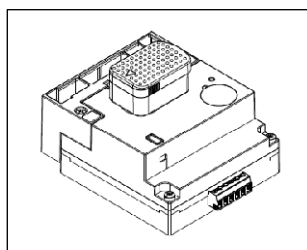
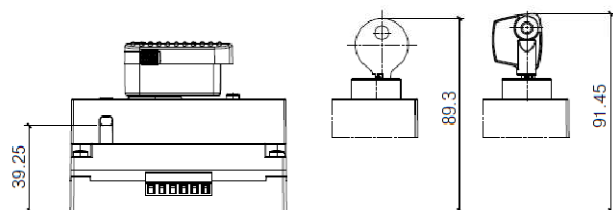
Direct rotary handle



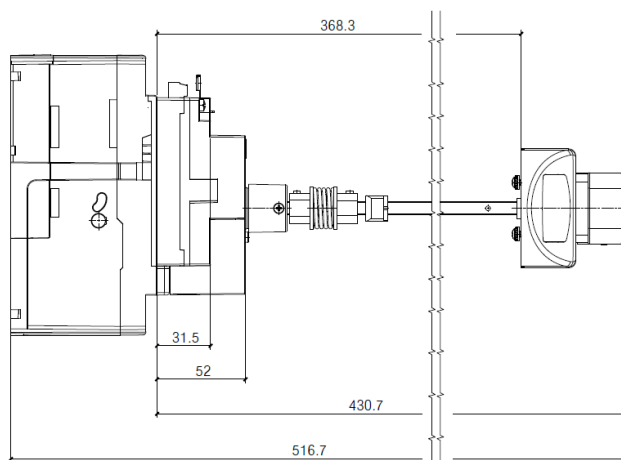
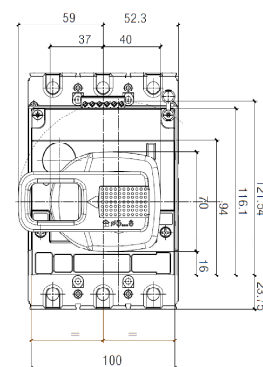
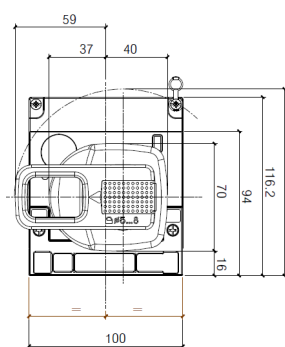
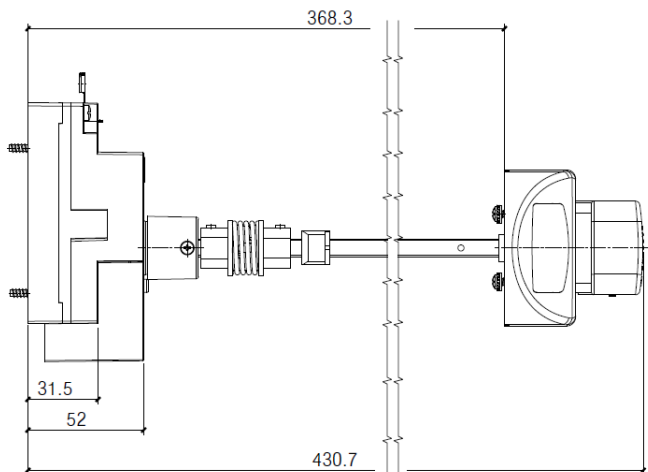
Megatiker M3 250 thermal magnetic with earth leakage circuit breakers and MS3 250 switch disconnectors with earth leakage

Reference(s) :

T734F16D;T734F20D;T734F25D;T734F32D;T734F40D;T734F50D;T734F63D;
T734F80D; T734F100D;T734F125D;T734F160D;T734F200D;T734F250D;
T734N16D;T734N20D;T734N25D;T734N32D;T734N40D;T734N50D;
T734N63D;T734N80D;T734N100D;T734N125D;T734N160D;T734N200D;
T734N250D; T734S250D



Vari-depth rotary handle

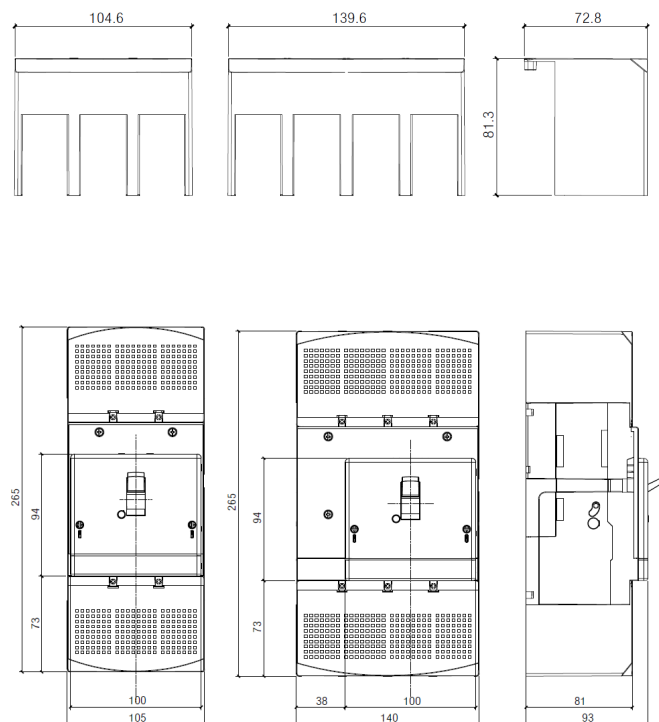


Megatiker M3 250 thermal magnetic with earth leakage circuit breakers and MS3 250 switch disconnectors with earth leakage

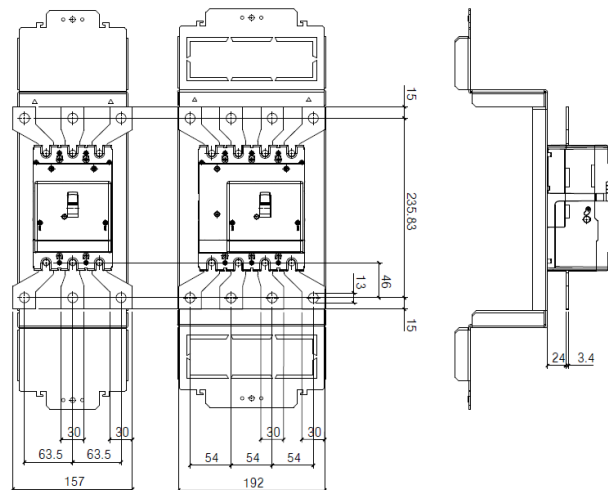
Reference(s) :

T734F16D;T734F20D;T734F25D;T734F32D;T734F40D;T734F50D;T734F63D;
T734F80D; T734F100D;T734F125D;T734F160D;T734F200D;T734F250D;
T734N16D;T734N20D;T734N25D;T734N32D;T734N40D;T734N50D;
T734N63D;T734N80D;T734N100D;T734N125D;T734N160D;T734N200D;
T734N250D; T734S250D

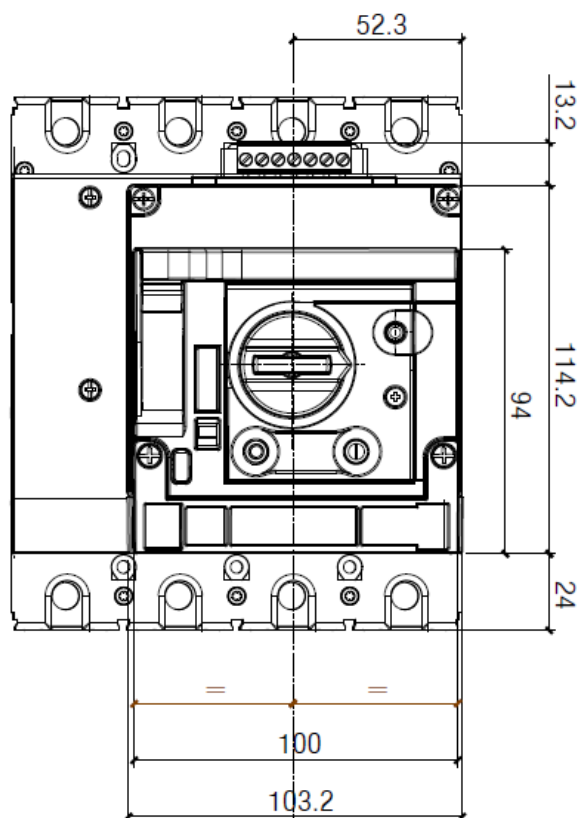
Sealable terminal shields



Spreaders

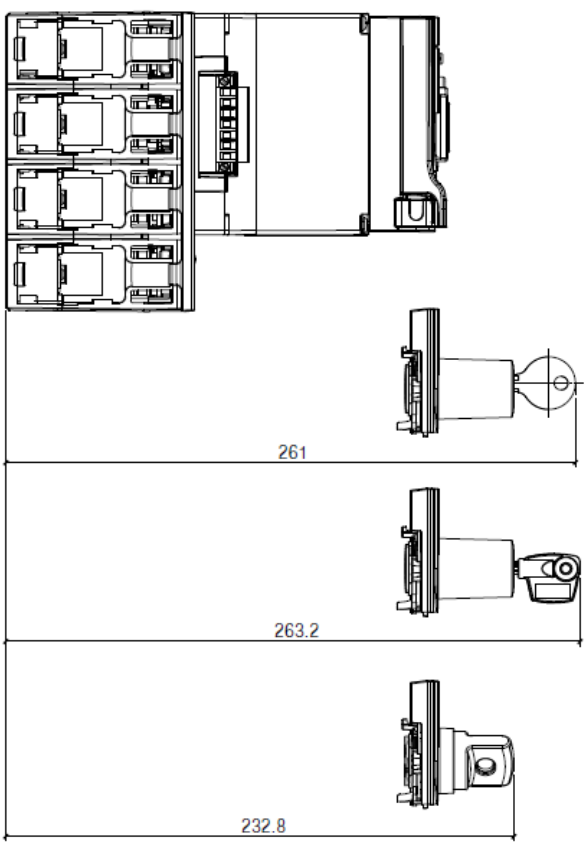
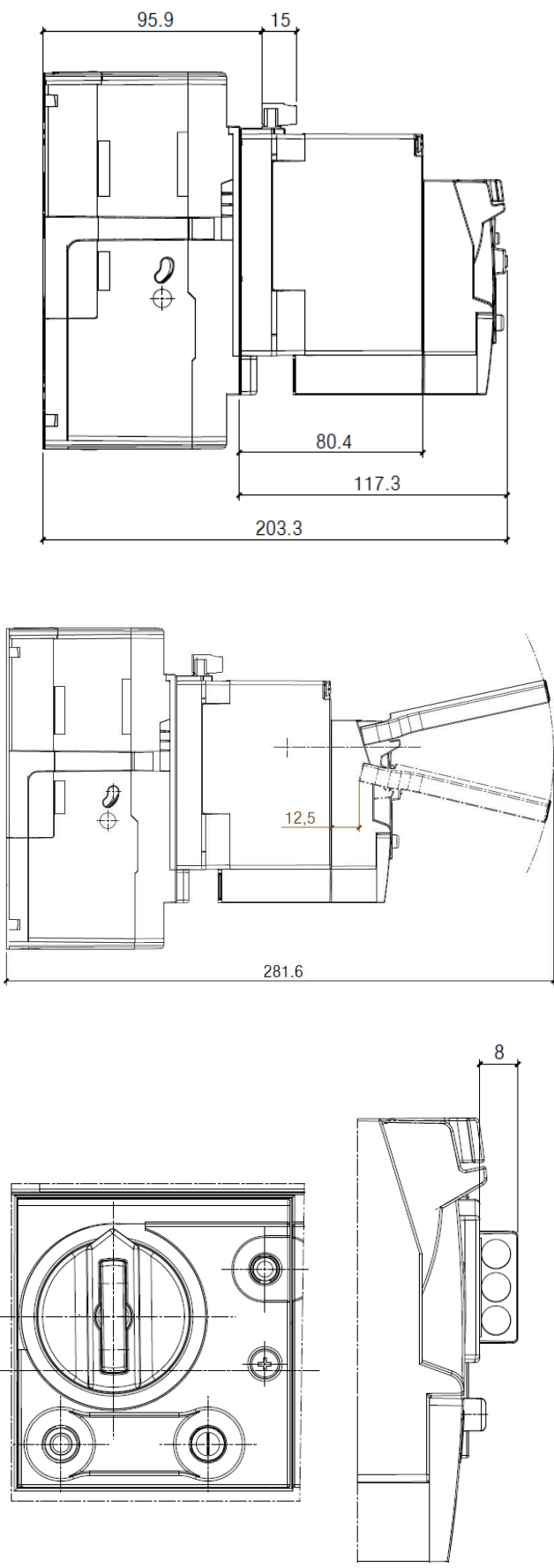


Motor operator



Megatiker M3 250 thermal magnetic with earth leakage circuit breakers and MS3 250 switch disconnectors with earth leakage

Reference(s) :
T734F16D;T734F20D;T734F25D;T734F32D;T734F40D;T734F50D;T734F63D;
T734F80D; T734F100D;T734F125D;T734F160D;T734F200D;T734F250D;
T734N16D;T734N20D;T734N25D;T734N32D;T734N40D;T734N50D;
T734N63D;T734N80D;T734N100D;T734N125D;T734N160D;734N200D;
T734N250D; T734S250D



3.2 Weights

Configuration	Weights (Kg)
Circuit breaker/switch disconnector	4P 2.6
Plug-in*	3.5
Draw-out**	2.5
Interlock*	0.35
Rear interlock (for plug-in/draw-out version)*	5
Motor operator*	1
* to add to device weight	
* to add to device and plug-in weights	

4. OVERVIEW

4.1 Supplied with:

- 4 fixing screws
- 8 screws for connections
- 3 phase insulators

5. ELECTRICAL CONNECTIONS

5.1 Mounting possibilities

On plate:

- Vertical
- Horizontal
- Supply inverter type

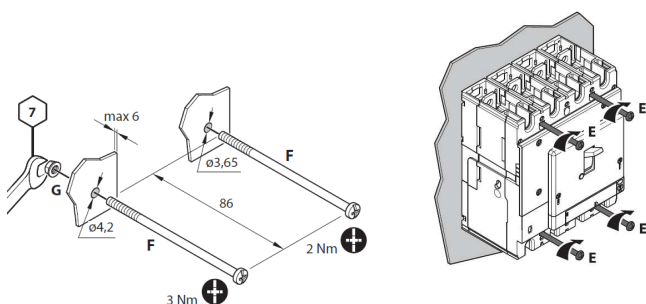
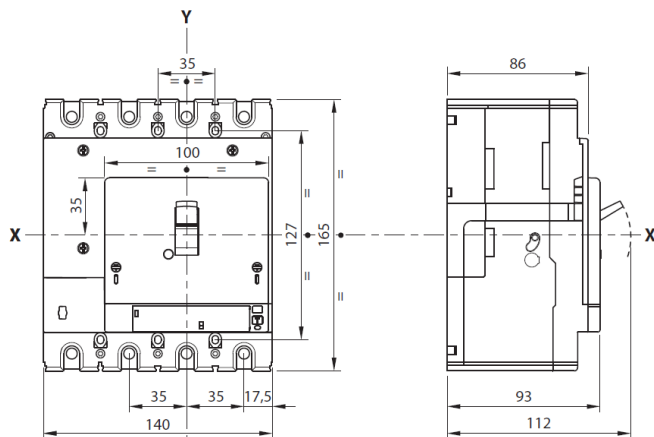
Megatiker M3 250 thermal magnetic with earth leakage circuit breakers and MS3 250 switch disconnectors with earth leakage

Reference(s) :

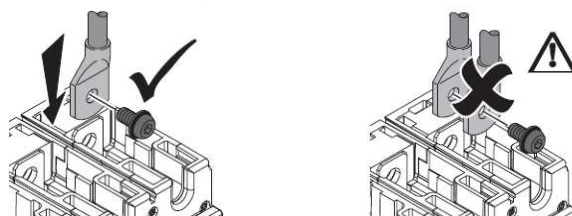
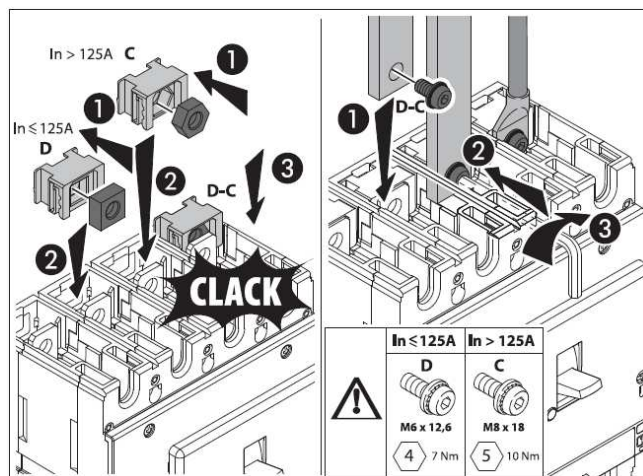
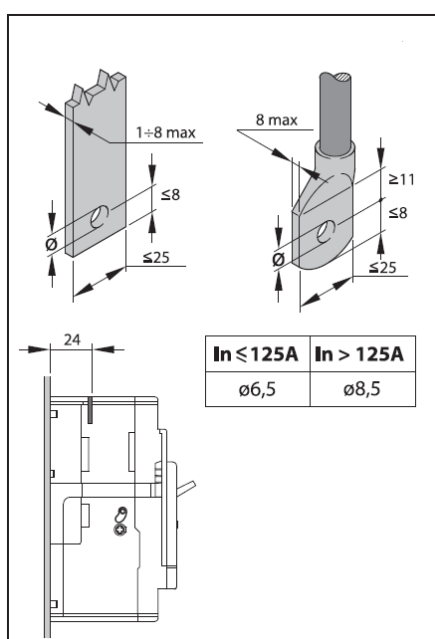
T734F16D;T734F20D;T734F25D;T734F32D;T734F40D;T734F50D;T734F63D;
T734F80D; T734F100D;T734F125D;T734F160D;T734F200D;T734F250D;
T734N16D;T734N20D;T734N25D;T734N32D;T734N40D;T734N50D;
T734N63D;T734N80D;T734N100D;T734N125D;T734N160D;T734N200D;
T734N250D; T734S250D

5.2 Mounting

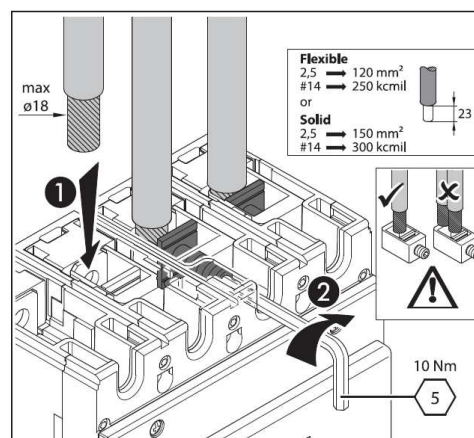
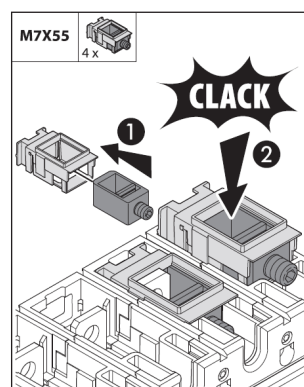
(see instruction sheet for detailed mounting procedures)



Busbars/cable lugs:



Cables:



Megatiker M3 250 thermal magnetic with earth leakage circuit breakers and MS3 250 switch disconnectors with earth leakage

Reference(s) :

T734F16D;T734F20D;T734F25D;T734F32D;T734F40D;T734F50D;T734F63D;
T734F80D; T734F100D;T734F125D;T734F160D;T734F200D;T734F250D;
T734N16D;T734N20D;T734N25D;T734N32D;T734N40D;T734N50D;
T734N63D;T734N80D;T734N100D;T734N125D;T734N160D;T734N200D;
T734N250D; T734S250D

6. ELECTRICAL AND MECHANICAL CHARACTERISTICS

Circuit breaker

Circuit Breaker	Megatiker M3 250 + RCD F/N (36kA, 50kA)
Rated current (A)	16-20-25-32-40-50-63-80-100-125-160-200-250
Poles	4
Pole pitch (mm)	35
Rated insulation voltage (50/60Hz) U_i (V)	500
Rated operating voltage (50/60Hz) U_o (V)	500
Rated impulse withstand current U_{imp} (kV)	6
Rated frequency (Hz)	50 - 60
Reference ambient temperature(°C)	40 - 50
Operating temperature (°C)	-25 + 70
Mechanical endurance (cycles)	12000
Mechanical endurance with motor control (cycles)	12000
Electrical endurance at I_n (cycles)	6000
Electrical endurance at 0.5 I_n (cycles)	6000
Utilization category	A
Suitable for isolation	Yes
Type of protection	Thermal-magnetic
Thermal adjustment I_t	0.8 - 0.9 - 1 x I_n
Magnetic adjustment I_Δ (A)	400 A up to $I_n=40A$ (not adjustable); 6.5-10-13 x I_n for $I_n=50A$; 5-7.5-10 x I_n up to $=250A$;
Neutral protection for 4P (% I_n of phase pole)	100
Earth leakage type	A - Integrated
Adjustable sensitivity (A)	0.03- 0.3 - 1 - 3
Adjustable tripping (s)	0 - 0.3 - 1 - 3 (with 0.03 possible only 0s)
Dimensions (W x H x D) (mm)	140 x 165 x 86 (4P)

Switch disconnectors

Switch	Megatiker MS3 250 + RCD
Uninterrupted nominal current I_n (A)	250
Short-time resistive current I_{rs} (kA) for 1s	3
Rated short-circuit making capacity I_{cm} (kA)	4.3
Rated insulation voltage U_i (V AC)	500
Maximum rated operating voltage U_o (V AC)	500 (@ AC22A) - 415 (@ AC23A)
Rated impulse withstand voltage U_{imp} (kV)	8
Utilization category	AC22A ($I_n=250A$)
Suitable for isolation	Yes
Nominal frequency (Hz)	50-60
Operating temperature (°C)	-25 + 70
Mechanical endurance (cycles)	12000
Mechanical endurance with motor control (cycles)	12000
Electrical endurance at I_n (cycles)	6000
Electrical endurance at 0.5 I_n (cycles)	6000
Dimensions (W x H x D) (mm)	140 x 165 x 86 (4P)

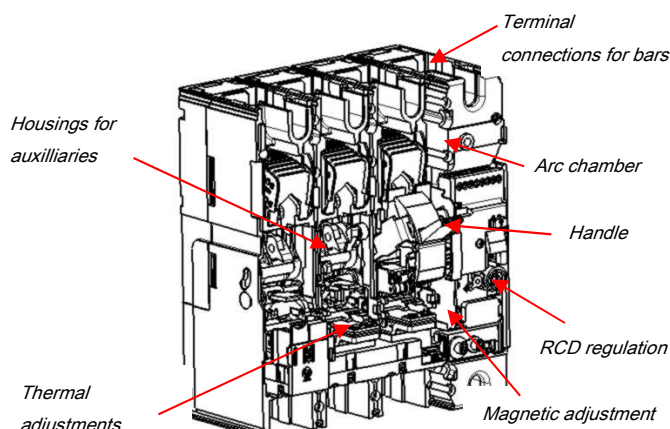
The maximum admissible (absolute) temperature is 125°C (for detail, see IEC 60947-1 and 60947-2).

Megatiker product line has the possibility to supply both in "direct" and "reverse" feed.

If "direct", the word "LINE" needs to be marked on supply terminals (normally the top ones), as well as "LOAD" has to be written on the output terminals to be connected to the load (normally the bottom ones).

If "reverse", any indications about LINE / LOAD are NOT expected on the product.

6.1 Main parts constituting the circuit breaker



6.2 Breaking capacity (kA)

		Breaking capacity (kA) & I_{cs}	
		4P	
IEC 60947-2	U_e/I_{cu} (I_{cu} letter)	36kA (F)	50kA (N)
	220/240 V AC	70	90
	380/415 V AC	36	50
	440/460 V AC	25	30
	480/500 V AC	16	18
	I_{cs} (% I_{cu})	100	100
Rated making capacity under short circuit I_{cm}			
I_{cm} (kA) at 415V		76.5	105
NEMA AB-1	220/240 V AC	70	90
	480/500 V AC	16	18

6.3 Rated current (I_n) at 40°C / 50°C

I_n (A)	Phases limit trip current			
	thermal (I_t)		magnetic (I_Δ)	
	0.8 x I_n	1 x I_n	min	max
16	13	16	400	400
20	16	20	400	400
25	20	25	400	400
32	26	32	400	400
40	32	40	400	400
50	40	50	325	650
63	51	63	315	630
80	64	80	400	800
100	80	100	500	1000
125	100	125	625	1250
160	128	160	800	1600
200	160	200	1000	2000
250	200	250	1250	2500

6.3 Load operations

Force on handle	N
Opening operation	63,5
Closing operation	66
Restore operation	86,5

Megatiker M3 250 thermal magnetic with earth leakage circuit breakers and MS3 250 switch disconnectors with earth leakage

6.4 Electrodynamic forces

The table below shows an indication of suggested distances to keep between the breaker and the first fixing point of the conductor and bars in order to reduce the effects of the electrodynamic stresses that may be created during a short circuit. In the realization of anchorage system it is recommend the use of isolators suitable for the type of conductor used and the operating voltage.

I _{cc} (kA)	Maximum Distance (mm)
36	350
50	300

According to conductor type and bar system (except Legrand bar kits), the choice of the distance to keep is to be calibrated by the installer.

Also installer must take into account the weight of the conductors so that this does not affect the electrical junction between the conductor itself and the connection point.

6.5 Power losses per pole under I_n

Circuit breaker

	Power losses per pole (W)													
In (A)	16	20	25	32	40	50	63	80	100	125	160	200	250	
Cage terminals	3.29	4.91	5.87	5.49	8.44	6.33	10.39	7.94	8.55	14.00	12.98	16.38	23.33	
Lugs	3.01	4.49	7.01	5.02	7.71	5.78	9.49	7.25	7.81	12.79	11.86	14.96	21.31	
Spreaders	2.53	3.78	4.52	4.22	6.49	4.87	7.99	6.11	6.58	10.77	9.98	12.6	17.95	
Rear terminals	3.1	4.63	5.54	5.17	7.95	5.97	9.79	7.48	8.06	13.19	12.23	15.43	21.99	

Note: power losses in the table above are referred and measured as described in the standard IEC 60947-2 (Annex G) for circuit-breakers. Values in the table are referred to a single phase.

Switch disconnectors

	Power losses per pole (W)
	I _n (A)
	250
Cage terminals	14.84
Lugs	13.55
Spreaders	11.41
Rear terminals	13.98

Note: power losses in the table above are referred and measured as described in the standard IEC 60947-3 for switches. Values in the table are referred to a single phase.

Reference(s) :

T734F16D;T734F20D;T734F25D;T734F32D;T734F40D;T734F50D;T734F63D;
T734F80D; T734F100D;T734F125D;T734F160D;T734F200D;T734F250D;
T734N16D;T734N20D;T734N25D;T734N32D;T734N40D;T734N50D;
T734N63D;T734N80D;T734N100D;T734N125D;T734N160D;T734N200D;
T734N250D; T734S250D

6.6 DERATINGS

according to IEC/EN 60947-1

6.6.1 Temperature

Rated current and his adjustment has to be considered relating to a rise or fall of ambient temperature and to a different version or installation conditions. The table below indicates the maximum long-time (LT) protection setting depending on the ambient temperature.

I _n (A)	0	10	20	30	40	50	60	70
16	18	17	17	16	16	16	15	14
20	22	22	21	20	20	20	19	17
25	28	27	26	26	25	25	23	21
32	35	35	35	33	32	32	30	27
40	44	43	42	41	40	40	37	34
50	55	54	53	51	50	50	47	43
63	69	68	67	64	63	63	59	54
80	88	86	86	82	80	80	74	68
100	110	108	105	102	100	100	93	85
125	138	135	131	128	125	125	116	106
160	176	173	168	163	160	160	149	136
200	258	244	230	215	200	200	180	170
250	322	305	287	269	250	250	225	213

For derating temperature with other configurations, see table A.

6.6.2 Specific condition use

Climatic conditions

according to IEC/EN 60947-1 Annex Q, Cat. F subject to temperature, humidity, vibration, shock and salt mist.

Electromagnetic disturbances (EMC)

for Megatiker M3 circuit breakers, according to IEC/EN 60947-2 Annex F

Pollution degree

for Megatiker M3 circuit breakers, degree 3, according to IEC/EN 60947-2

6.6.3 Altitude

Altitude derating for Megatiker with RCD

Altitude (m)	2000	3000	4000	5000
U _e (V)	500	430	380	330
I _n (A) (T _a = 40°C/50°C)	1 x I _n	0.98 x I _n	0.93 x I _n	0.9 x I _n

Megatiker M3 250 thermal magnetic with earth leakage circuit breakers and MS3 250 switch disconnectors with earth leakage

7. CONFORMITY

Megatiker range of product concerning circuit-breakers and trip-free switches exceed compliance with the EN/IEC standard 60947-2 and 60947-3 respectively.

Certification available by IECEE CB-scheme or LOVAG Compliance scheme.

Marks as CCC (China), EAC (Eurasian Federation) or different local certification are available.

Megatiker are in conformity with the Lloyds Shipping Register, RINA and Bureau Veritas Marine.

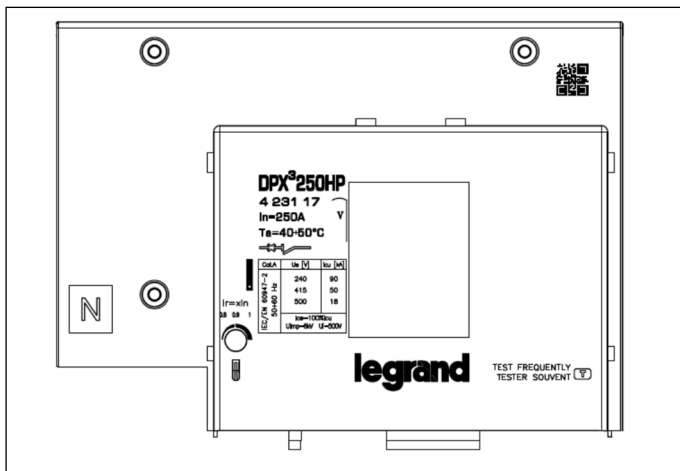
Megatiker respect the European Directives REACH, RoHS, RAEE and Product Environment Product (PEP Ecopassport) are available.

For specific information, please contact Legrand support.

7.1 Marking

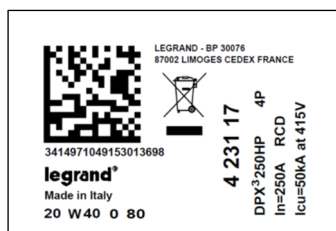
Product (both circuit breakers and switch disconnectors) are provided with labelling in full conformity to the referred standard and directives requirements by laser or sticker labels (for illustrative purposes only) as:

Product laser label on front



Product sticker label on side

- Manufacturer responsible
- Denomination and type product
- Standard conformity
- Mark/Licence (if any)
- Directive requirements
- Bar code identification product
- Manufacturing Country

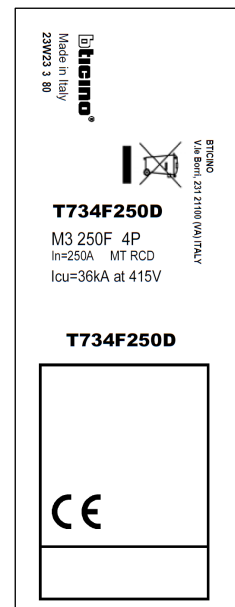


Reference(s) :

T734F16D;T734F20D;T734F25D;T734F32D;T734F40D;T734F50D;T734F63D;
T734F80D; T734F100D;T734F125D;T734F160D;T734F200D;T734F250D;
T734N16D;T734N20D;T734N25D;T734N32D;T734N40D;T734N50D;
T734N63D;T734N80D;T734N100D;T734N125D;T734N160D;T734N200D;
T734N250D; T734S250D

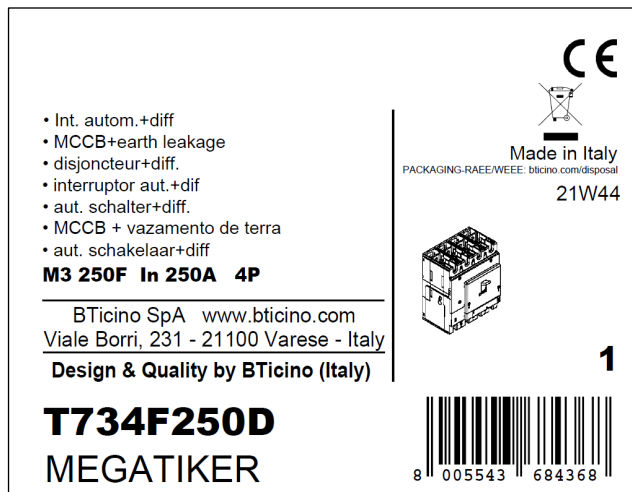
Mark sticker label on side

- Product code
- Mark/Licence (if any)
- Country deviation, if any



Packaging sticker label

- Manufacturer responsible
- Denomination and type product
- Mark/Licence (if any)
- Directive requirements
- Bar code identification product



Megatiker M3 250 thermal magnetic with earth leakage circuit breakers and MS3 250 switch disconnectors with earth leakage

8. EQUIPMENTS AND ACCESSORIES

8.1 Releases (for Megatiker M1, M2, M3 125 / 160 / 250)

- shunt releases with voltage:

12 Vac and dc
24 Vac and dc
48 Vac and dc
110÷130 Vac
220÷277 Vac
380÷480 Vac

ref. M7S012
ref. M7S024
ref. M7S048
ref. M7S110
ref. M7S230
ref. M7S415

Maximum power = 400 VA / W

- undervoltage releases with voltage:

12 Vac and dc
24 Vac and dc
48 Vac and dc
110÷130 Vac and dc
220÷240 Vac
277 Vac
380÷415 Vac
440÷480 Vac

ref. M7U012
ref. M7U024
ref. M7U048
ref. M7U110
ref. M7U230
ref. M7U277
ref. M7U415
ref. M7U480

Maximum power = 4 VA

Circuit breaker opening time < 50 ms

UVR releases can be used on DPX3 125/250 HP starting from batch 19W15

- time-lag undervoltage releases (800 ms)

Time-lag modules with voltage:

24 V ac/dc
230 V ac
400 V ac

ref. M7000ME/024
ref. M7000MR/230
ref. M7000MR/400

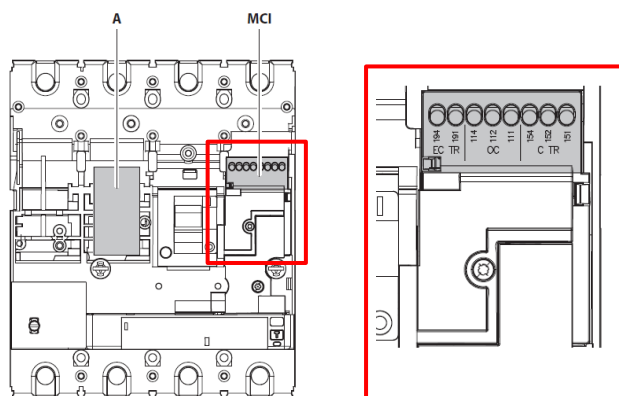
Release

(to be equipped with a time-lag module M7000MR/230/400)

8.2 Auxiliary contacts

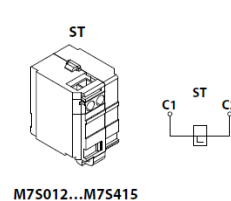
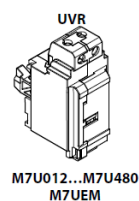
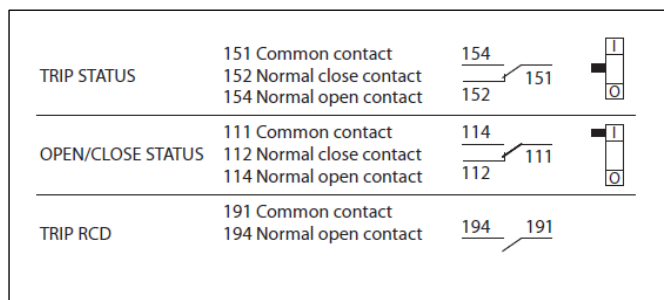
For version of Megatiker M3 250 HP thermal magnetic, with earth leakage module, auxiliary contacts are integrated inside module M.C.I (see instruction sheet for details).

Here a connection scheme to get auxiliary functionality:



Reference(s) :

T734F16D;T734F20D;T734F25D;T734F32D;T734F40D;T734F50D;T734F63D;
T734F80D; T734F100D;T734F125D;T734F160D;T734F200D;T734F250D;
T734N16D;T734N20D;T734N25D;T734N32D;T734N40D;T734N50D;
T734N63D;T734N80D;T734N100D;T734N125D;T734N160D;T734N200D;
T734N250D; T734S250D



	A
UVR	✓
ST	✓

To get more information on auxiliary mounting procedures, please refer to product instruction sheet.

8.3 Universal keylocks

These keylocks must be used for all the accessories that can be locked:

- rotary handle
- motor operator
- plug-in mechanism
- draw-out mechanism

For each of these, a specific accessory (indicated in the specific section of this datasheet) must be added in order to get the complete locking kits for the specific application.

- 1 lock + 1 flat key with random mapping ref. M7K01
- 1 lock + 1 flat key with fixed mapping (EL43525) ref. M7K02
- 1 lock + 1 flat key with fixed mapping (EL43363) ref. M7K03
- 1 lock + 1 star key with random mapping ref. M7K04

Megatiker M3 250 thermal magnetic with earth leakage circuit breakers and MS3 250 switch disconnectors with earth leakage

8.3 Rotary handles

Direct on DPX³ (with auxiliary option)

- Standard (black) ref. M7R24
- For emergency use (red / yellow) ref. M7R25

Vari-depth handle IP55 (with auxiliary option)

- Standard (black) ref. M7R26
- For emergency use (red / yellow) ref. M7R27

Locking accessories (for rotary handle with auxiliary option)

- Key lock accessory for direct rotary handle ref. M7R30
- Key lock accessory for vari-depth rotary handle ref. M7R31
(ref. M7R31 is compatible with Megatiker M3 125/160 also)

Ref. M7R30 and M7R31 must be used with universal keylocks to get the complete locking kit for rotary handle

8.4 Motor operators

For synchronized operations (energy storage type):

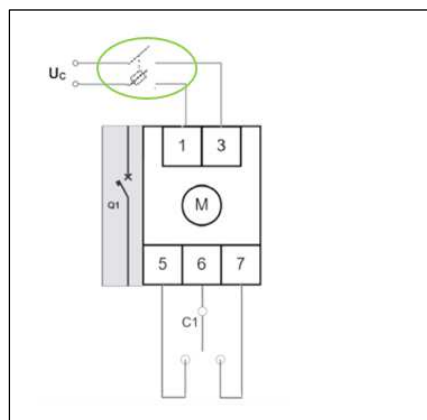
- 24 Vac and dc ref. M7M024
- 48 Vac and dc ref. M7M048
- 110 Vac ref. M7M110
- 230 Vac ref. M7M230

Technical parameters:

Voltage	Property	AC		DC	
		Opening	Closing	Opening	Closing
24V ac/dc	Maximum inrush power (VA)	75	430	55	320
	Rated power (VA)	45	-	20	-
	Absorption time (s)	2.8	0.01	3.3	0.01
	Operating current time (s)	1.1	0.03	1.2	0.03
48V ac/dc	Maximum inrush power (VA)	85	1000	70	690
	Rated power (VA)	65	-	15	-
	Absorption time (s)	3.3	0.006	3.8	0.006
	Operating current time (s)	1.1	0.02	1.3	0.02
110V ac	Maximum inrush power (VA)	95	600	-	-
	Rated power (VA)	60	-	-	-
	Absorption time (s)	3	0.02	-	-
	Operating current time (s)	1.0	0.03	-	-
230V ac	Maximum inrush power (VA)	125	460	-	-
	Rated power (VA)	70	-	-	-
	Absorption time (s)	2.5	0.08	-	-
	Operating current time (s)	0.9	0.03	-	-

It is necessary to foresee a protection device (e.g. fuse) along the motor operator power line. The correct size of the fuse depends on the motor version and on the number of users.

Here a schematic example:



Reference(s) :

T734F16D;T734F20D;T734F25D;T734F32D;T734F40D;T734F50D;T734F63D;
T734F80D; T734F100D;T734F125D;T734F160D;T734F200D;T734F250D;
T734N16D;T734N20D;T734N25D;T734N32D;T734N40D;T734N50D;
T734N63D;T734N80D;T734N100D;T734N125D;T734N160D;T734N200D;
T734N250D; T734S250D

Locking accessory (for motor operator)

- Padlock (for motor operator locking) ref. M7M61
- Key lock accessory for motor operator ref. M7M60

Ref. M7M60 must be used with universal keylocks to get the complete locking kit for motor operator

8.6 Mechanical accessories

- Padlock (for locking in "OPEN" position) ref. M7X02
(ref. M7X02 is compatible with Megatiker M1, M2 and M3125/160)
- Sealable terminal shields:
 - Set of 2 (for 3P) ref. M7C22
 - Set of 3 (for 4P) ref. M7C23
- Insulated shields:
 - Set of 2 (for 3P) ref. M7F01
 - Set of 3 (for 4P) ref. M7F02
 (ref. M7F01/02 are compatible with Megatiker M3 125/160)

8.7 Connection accessories

Cage terminals

- Set of 4 terminals for cables 150 mm² max (rigid) ref. M7X55
- or 120 mm² max (flexible) Cu/Al

Spreaders (incoming or outgoing):

- Set of 4 (for 4P) ref. M7A53

Rear terminals (incoming or outgoing):

- Set of 4 (for 4P) ref. M7A57

Cage terminal use specifications

Megatiker M3 250							
Type of cage terminal	Cable standard suggested cross section (mm ²)*			Dimensions limits of cable for cage terminals			
	In (A)	Cu	Al	MIN cross section (mm ²)		MAX cross section (mm ²)	
				Flexible	Rigid	Flexible	Rigid
Standard	16	2,5	4	2,5	2,5	120	150
	20	2,5	4				
	25	4	6				
	32	6	10				
	40	10	16				
	50	10	16				
	63	16	25				
	80	25	35				
	100	35	50				
	125	50	70				
	160	70	\				
	200	95	\				
	250	120	\				

* The suggested cross section are in compliance with standard IEC60947-1 (ed.6 2020/04) and IEC60947-2 (ed.5.1 2019/07)

Megatiker M3 250 thermal magnetic with earth leakage circuit breakers and MS3 250 switch disconnectors with earth leakage

Reference(s) :

T734F16D;T734F20D;T734F25D;T734F32D;T734F40D;T734F50D;T734F63D;
T734F80D; T734F100D;T734F125D;T734F160D;T734F200D;T734F250D;
T734N16D;T734N20D;T734N25D;T734N32D;T734N40D;T734N50D;
T734N63D;T734N80D;T734N100D;T734N125D;T734N160D;T734N200D;
T734N250D; T734S250D

8.8 Plug-in version

(A plug-in is a Megatiker M3 250 fitted with special terminals and mounted on a plug-in base)

Bases

(for plug-in and draw-out versions for M3 250 HP and MS3 250 HP)

- Plug-in/draw-out base for 3P *ref. M7B50*
- Plug-in/draw-out base for 4P *ref. M7B51*
- Plug-in/draw-out mobile part kit for 3P *ref. M7B52*
- Plug-in/draw-out mobile part kit for 4P *ref. M7B53*

Plug-in accessories

Locking accessory (for plug-in)

- Key lock accessory for plug-in *ref. M7B64*

Ref. M7B64 must be used with universal keylocks to get the complete locking kit for plug-in version

8.9 Draw-out version

(A Megatiker M3 250 draw-out version is a plug-in fitted with a "Debro-lift" mechanism which can be used to withdraw the breaker while keeping it on its base)

"Debro-lift" mechanism

(supplied with a rigid slide and handle for drawing-out)

- transformation kit for 4P *ref. M7B55*

Frontal masks for draw-out version

(to provide in addition to debro-lift mechanism according to accessory mounted)

- Frontal module, with frontal mask (3P and 4P) *ref. M7B60*
(if neither motor operator nor rotary handle are mounted)
- Frontal mask for motor operator (3P and 4P) *ref. M7B61*

Locking accessory (for draw-out)

- Padlock for draw-out position *ref. M7B66*
- Key lock accessory for draw-out *ref. M7B63*

Ref. M7B63 must be used with universal keylocks to get the complete locking kit for draw-out version

Auxiliary contacts

- Automatic auxiliary contacts for draw-out version *ref. 4 222 30*
- 6 contact connector (under sliding contacts) *ref. 0 098 19*

(Ref. 0 098 19 can be used with both plug-in and draw-out version)

8.10 Interlock mechanism

(for interlocking 2 Megatiker M3 125 or 2 Megatiker M3 250 breakers)

No frame mixing in interlock mechanism

- Interlock mechanism – standard version *ref. M7I01*
(for fixed version Megatiker M3 125 and 250)
- Interlock mechanism – for electronic module *ref. M7I02*
(for fixed version Megatiker M3 125 and 250)
- Interlock plate for Megatiker M3 250 *ref. M7I05*
- Rear interlock mechanism *ref. M7I03*
(for Megatiker M3 250 plug-in and/or draw-out version)

If used ref. F15/7500P6, maximum 1 set

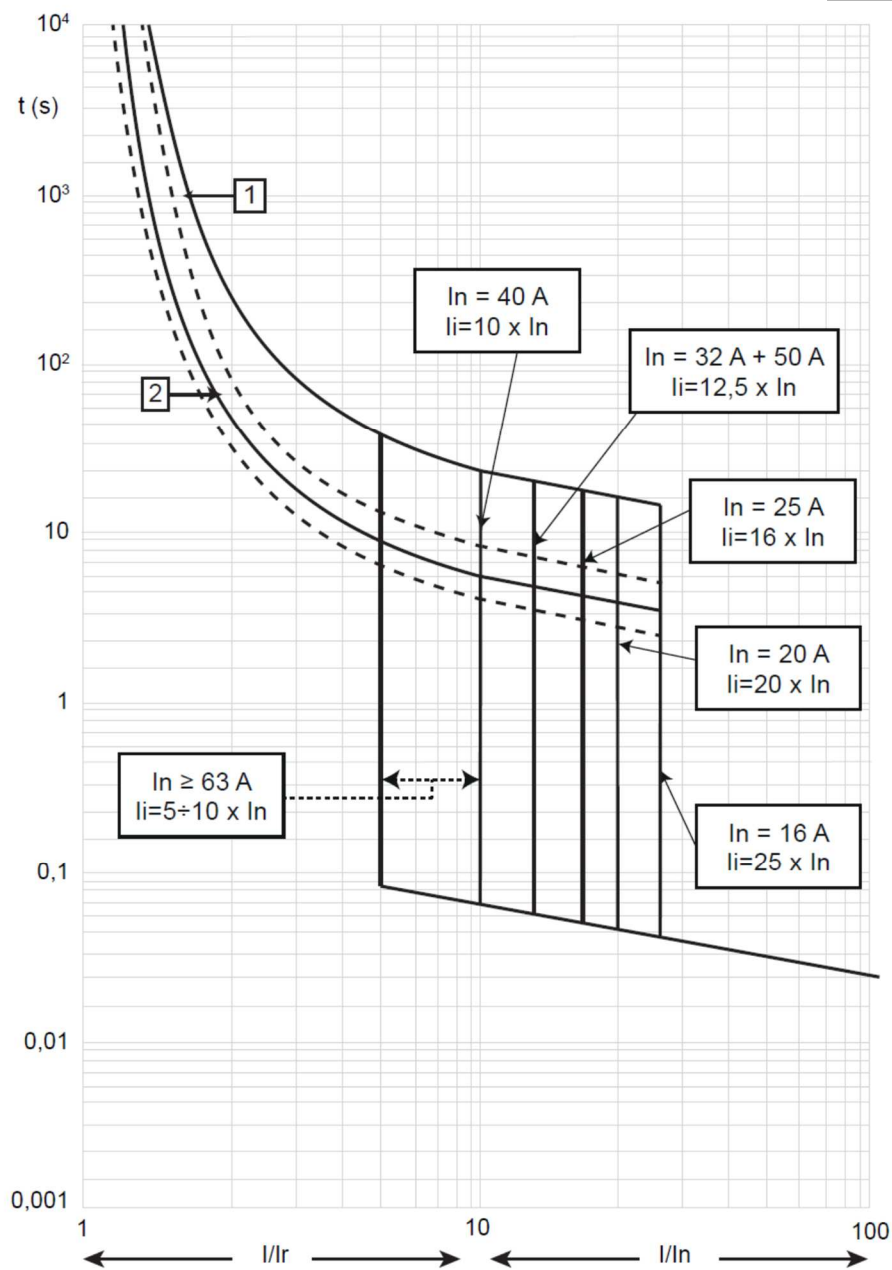
Megatiker M3 250 thermal magnetic with
earth leakage circuit breakers
and MS3 250 switch disconnectors with
earth leakage

Reference(s) :
T734F16D;T734F20D;T734F25D;T734F32D;T734F40D;T734F50D;T734F63D;
T734F80D; T734F100D;T734F125D;T734F160D;T734F200D;T734F250D;
T734N16D;T734N20D;T734N25D;T734N32D;T734N40D;T734N50D;
T734N63D;T734N80D;T734N100D;T734N125D;T734N160D;734N200D;
T734N250D; T734S250D

9. CURVES

9.1 Thermal magnetic tripping curve

Update: 11/06/2019



I_{cu} = 36-50 kA I_{max} = 250A 4 P U_e = 415Vac (IEC/EN 60947-2)

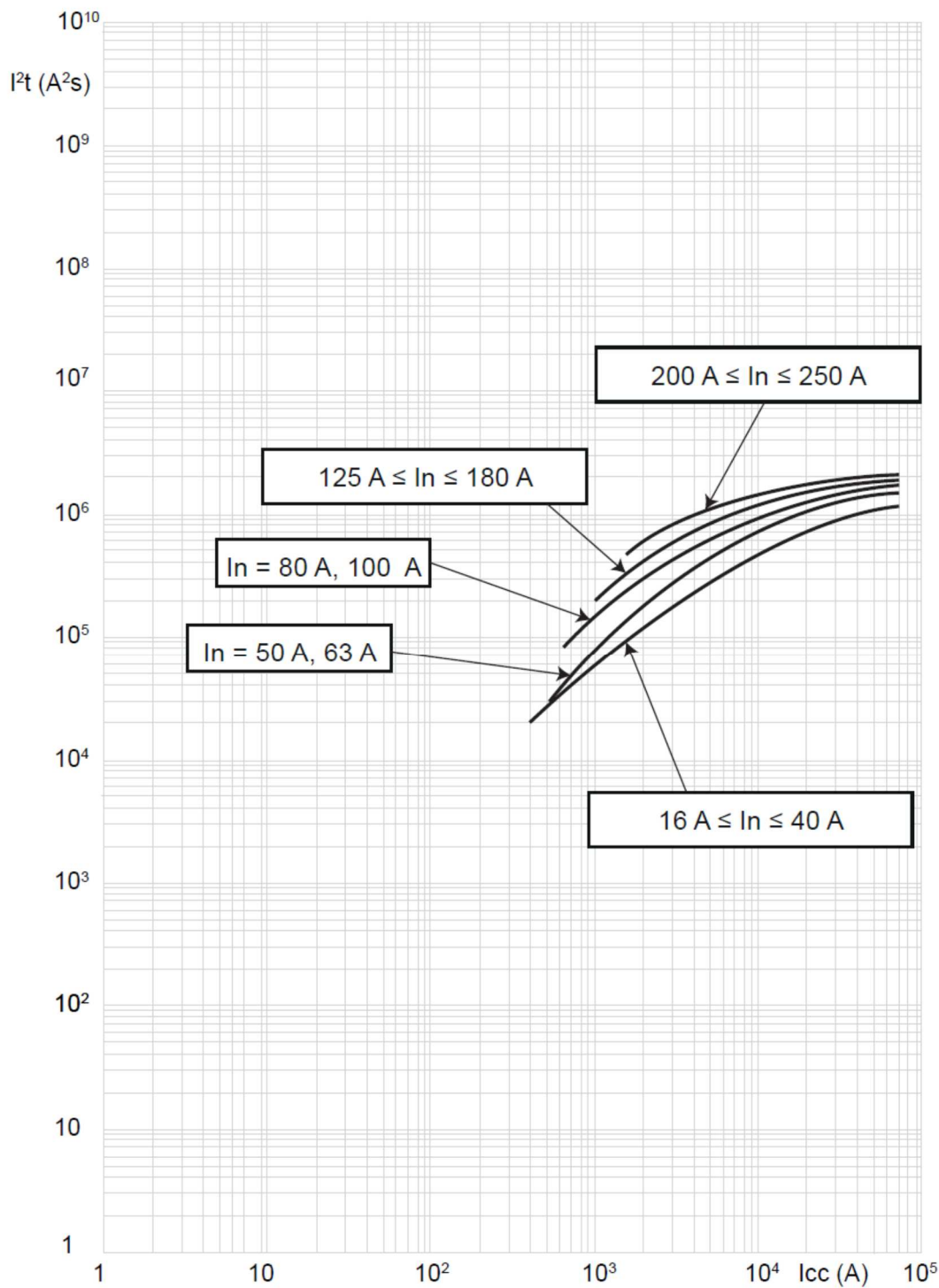
Value	Description
t	time
I	current
I _n	rated current
I _r	long time setting current
curve 1	characteristic with cold start
curve 2	characteristic with hot start

Megatiker M3 250 thermal magnetic with earth leakage circuit breakers and MS3 250 switch disconnectors with earth leakage

Reference(s) :
T734F16D;T734F20D;T734F25D;T734F32D;T734F40D;T734F50D;T734F63D;
T734F80D; T734F100D;T734F125D;T734F160D;T734F200D;T734F250D;
T734N16D;T734N20D;T734N25D;T734N32D;T734N40D;T734N50D;
T734N63D;T734N80D;T734N100D;T734N125D;T734N160D;734N200D;
T734N250D; T734S250D

9.2 Pass-through specific energy characteristic curve

Update: 11/06/2019



$I_{cu} = 36-50 \text{ kA}$ $I_{max} = 250A$ 4 P $U_o = 415Vac$ (IEC/EN 60947-2)

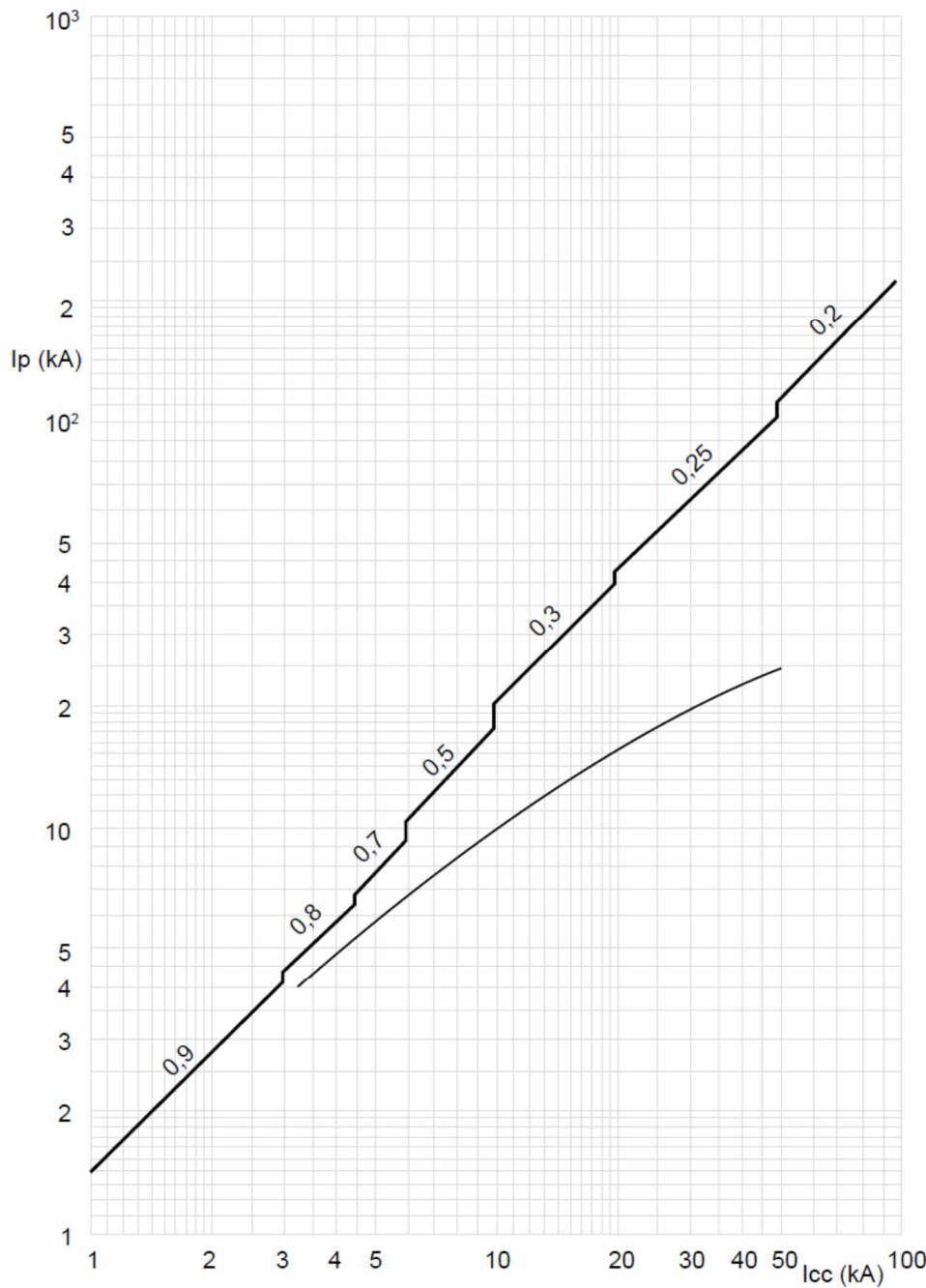
Value	Description
I_{cc}	short circuit current
$I^2t \text{ (A}^2\text{s)}$	pass-through specific energy

Megatiker M3 250 thermal magnetic with
earth leakage circuit breakers
and MS3 250 switch disconnectors with
earth leakage

Reference(s) :
T734F16D;T734F20D;T734F25D;T734F32D;T734F40D;T734F50D;T734F63D;
T734F80D; T734F100D;T734F125D;T734F160D;T734F200D;T734F250D;
T734N16D;T734N20D;T734N25D;T734N32D;T734N40D;T734N50D;
T734N63D;T734N80D;T734N100D;T734N125D;T734N160D;734N200D;
T734N250D; T734S250D

9.3 Cut-off peak current characteristic curve (kA)

Update: 30/08/2019



$I_{cc} = 36-50 \text{ kA}$ $I_{max} = 250A$ 4 P $U_o = 415Vac$ (IEC/EN 60947-2)

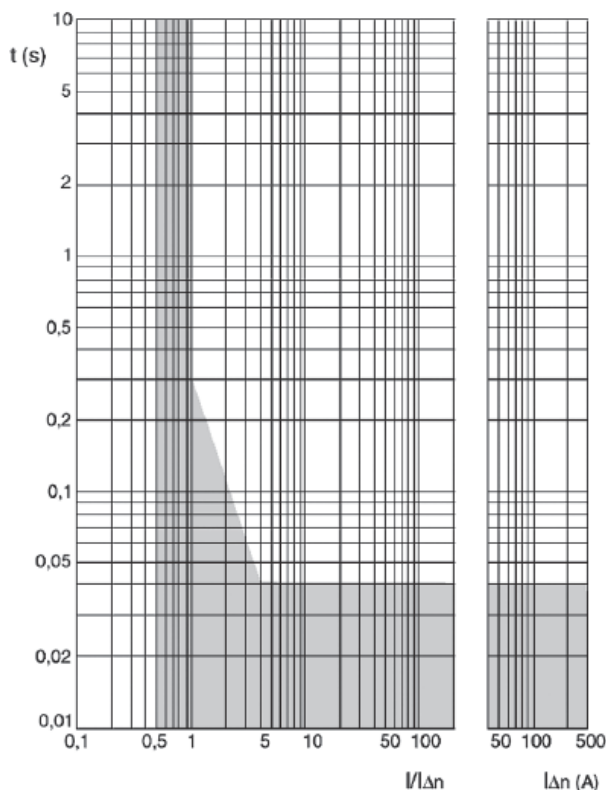
Value	Description
I_{cc}	estimated short circuit symmetrical current (RMS value)
I_p	maximum short circuit peak current
	maximum prospective short circuit peak current corresponding at the power factor
	maximum real peak short circuit current

Megatiker M3 250 thermal magnetic with earth leakage circuit breakers and MS3 250 switch disconnectors with earth leakage

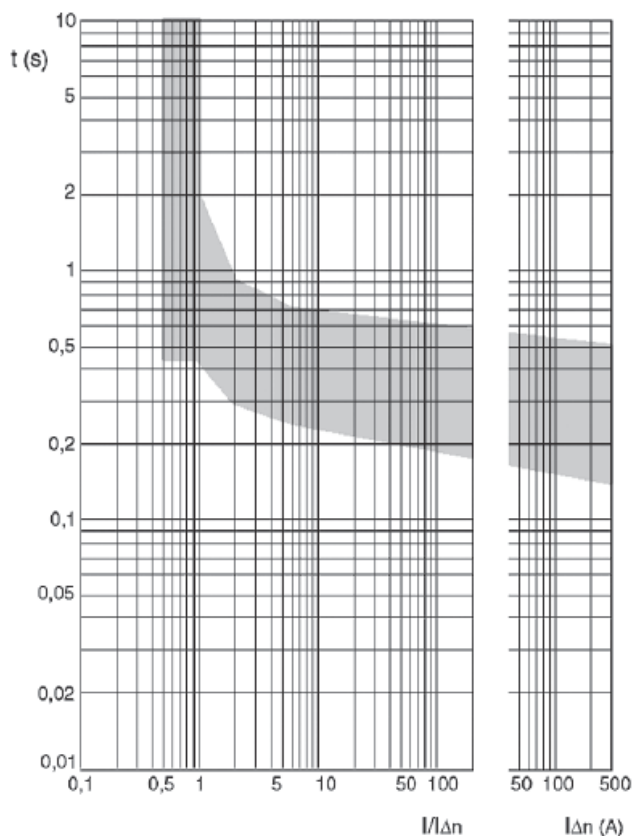
Reference(s) :

T734F16D;T734F20D;T734F25D;T734F32D;T734F40D;T734F50D;T734F63D;
T734F80D; T734F100D;T734F125D;T734F160D;T734F200D;T734F250D;
T734N16D;T734N20D;T734N25D;T734N32D;T734N40D;T734N50D;
T734N63D;T734N80D;T734N100D;T734N125D;T734N160D;734N200D;
T734N250D; T734S250D

9.4.1 Earth leakage curves, instantaneous



9.4.2 Earth leakage curves, time delay = 0.3 s

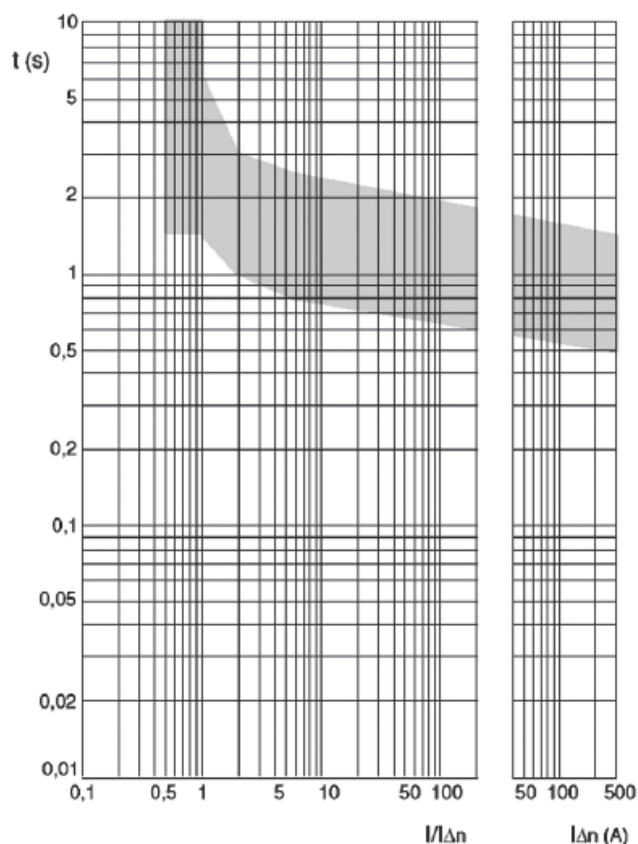


Megatiker M3 250 thermal magnetic with earth leakage circuit breakers and MS3 250 switch disconnectors with earth leakage

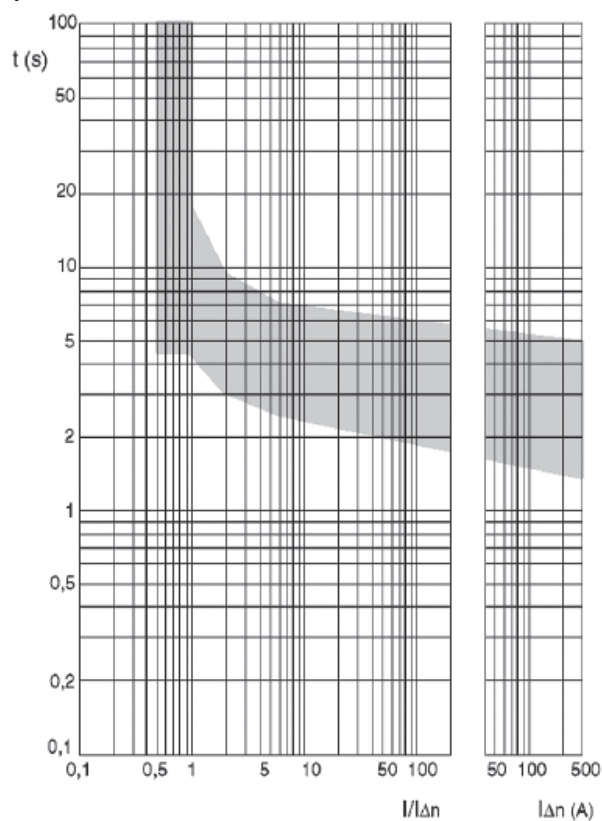
Reference(s) :

T734F16D;T734F20D;T734F25D;T734F32D;T734F40D;T734F50D;T734F63D;
T734F80D; T734F100D;T734F125D;T734F160D;T734F200D;T734F250D;
T734N16D;T734N20D;T734N25D;T734N32D;T734N40D;T734N50D;
T734N63D;T734N80D;T734N100D;T734N125D;T734N160D;734N200D;
T734N250D; T734S250D

9.4.3 Earth leakage curves, time delay = 1 s



9.4.4 Earth leakage curves, time delay = 3 s



Megatiker M3 250 thermal magnetic with earth leakage circuit breakers and MS3 250 switch disconnectors with earth leakage

Reference(s) :

T734F16D;T734F20D;T734F25D;T734F32D;T734F40D;T734F50D;T734F63D;
T734F80D; T734F100D;T734F125D;T734F160D;T734F200D;T734F250D;
T734N16D;T734N20D;T734N25D;T734N32D;T734N40D;T734N50D;
T734N63D;T734N80D;T734N100D;T734N125D;T734N160D;T734N200D;
T734N250D; T734S250D

A) Derating Temperature and configurations

	Ambient temperature									
	30 °C		40 °C		50 °C		60 °C		70 °C	
Fixed version	I _{max} (A)	I _r / I _n	I _{max} (A)	I _r / I _n	I _{max} (A)	I _r / I _n	I _{max} (A)	I _r / I _n	I _{max} (A)	I _r / I _n
Cage terminals, flexible cable	250	1	250	1	250	1	255	0.90	213	0.85
Lugs, flexible cable	250	1	250	1	250	1	238	0.95	255	0.90
Spreaders, flexible cable	250	1	250	1	250	1	238	0.95	255	0.90
Draw-out version	I _{max} (A)	I _r / I _n	I _{max} (A)	I _r / I _n	I _{max} (A)	I _r / I _n	I _{max} (A)	I _r / I _n	I _{max} (A)	I _r / I _n
Cage terminals, flexible cable	250	1	255	0.90	255	0.90	213	0.85	188	0.75

For further technical information, please contact Legrand technical support.

Data indicated in this document refers exclusively to test conditions according to product standards, unless otherwise indicated in the documentation.

For the different conditions of use of the product, inside electrical equipment or in any case inserted in the installation context, refer to the regulatory requirements of the equipment, local regulations and design specifications of the system