#### Viale Borri, 231, 21100 Varese, Italia

Phone:+39 0332 279111

### Megatiker M3 250 electronic (no display) circuit breakers

Reference(s):

see in the relative tables



CONTENTS	PAGES
1. USE	1
2. RANGE	1
3. DIMENSIONS AND WEIGHTS	1
4. OVERVIEW	5
5. ELECTRICAL CONNECTIONS	5
6. ELECTRICAL AND MECHANICAL	
CHARACTERISTICS	7
7. CONFORMITY	9
8. EQUIPMENTS AND ACCESSORIES	10
9. CURVES	13

#### 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.

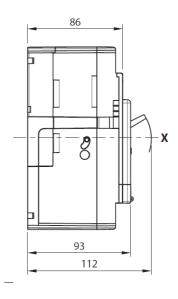
#### 2. RANGE

In (A)	Megatiker M3 250 electronic (no display ) version				
	36 kA		50	kA	
	3P	4P	3P	4P	
40	T733F40EB	T734F40EB	T733N40EB	T734N40EB	
100	T733F100EB	T734F100EB	T733N100EB	T734N100EB	
160	T733F160EB	T734F160EB	T733N160EB	T734N160EB	
250	T733F250EB T734F250EB		T733N250EB	T734N250EB	
	70 kA		100	.00 kA	
	3P	4P	3P	4P	
40	T733H40EB	T734H40EB	T733L40EB	T734L40EB	
100	T733H100EB	T734H100EB	T733L100EB	T734L100EB	
160	T733H160EB	T734H160EB	T733L160EB	T734L160EB	
250	T733H250EB	T734H250EB	T733L250EB	T734L250EB	

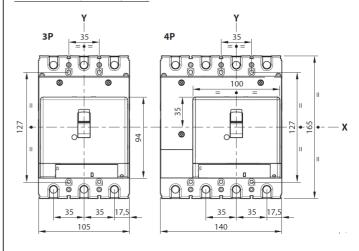
#### 3. DIMENSIONS AND WEIGHTS

#### 3.1 Dimensions

Lateral view



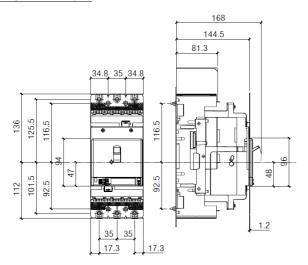
#### Frontal view (3 and 4 poles)



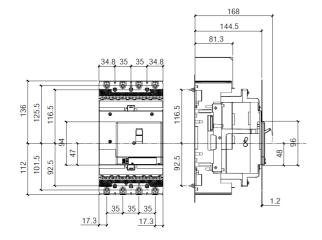
Reference(s):

see in the relative tables

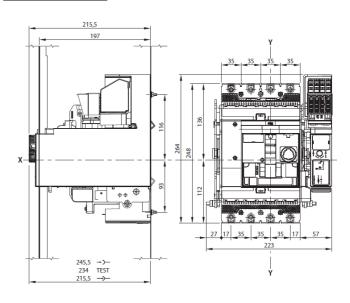
#### Plug-in version (3P)



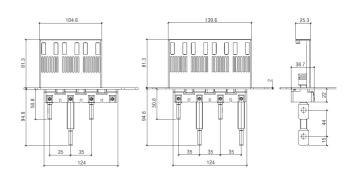
#### Plug-in version (4P)

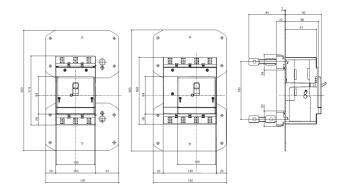


#### Draw-out version (4P)



#### Rear terminals



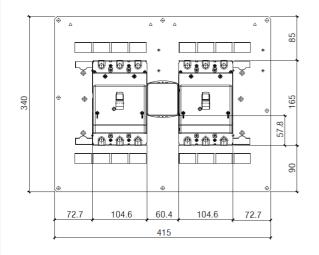


Reference(s):

see in the relative tables

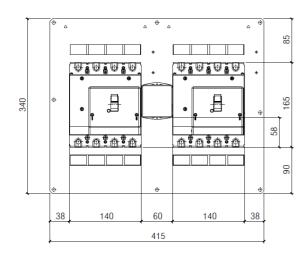
#### Interlock (3P)

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

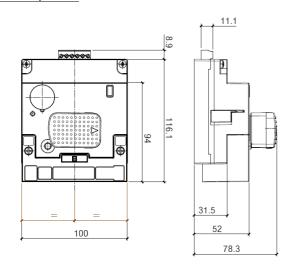


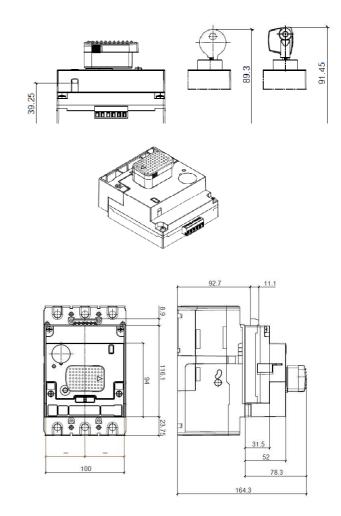
#### Interlock (4P)

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

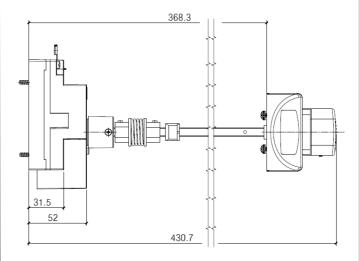


#### Direct rotary handle





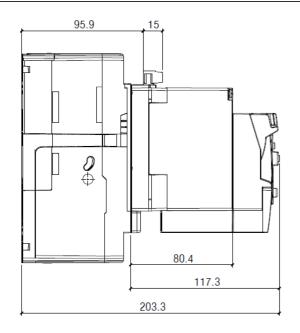
#### Vari-depth rotary handle

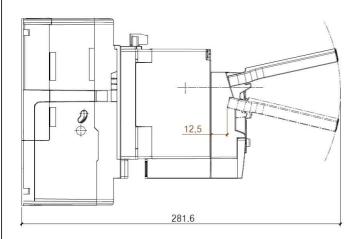


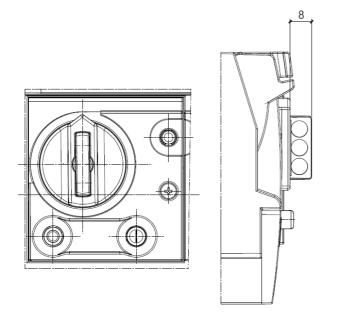
# Reference(s): Megatiker M3 250 electronic (no display) see in the relative tables circuit breakers Spreaders Motor operator 52.3 516.7 Sealable terminal shields 100 103.2

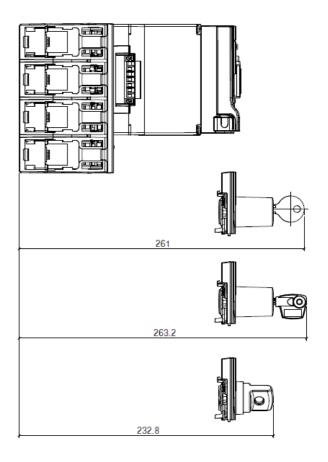
Reference(s):

see in the relative tables









#### 3.2 Weights

	Weights (Kg)	
Configuration	3P	4P
Circuit breaker	1.6	2.5
Plug-in*	3.5	4.5
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 plua-in weights		

#### 4. OVERVIEW

#### 4.1 Supplied with:

- fixing screws (2 for 3P and 4 for 4P)
- screws for connections (6 for 3P and 8 for 4P)
- phase insulators (2 for 3P and 3 for 4P)

#### 5. ELECTRICAL CONNECTIONS

#### 5.1 Mounting possibilities

On plate:

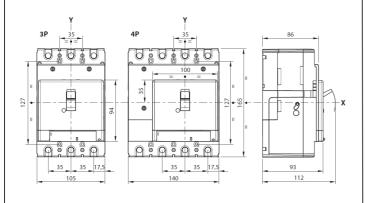
- Vertical
- Horizontal
- · Supply invertor type

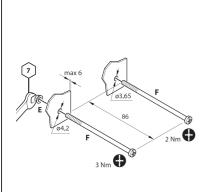
Reference(s):

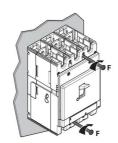
see in the relative tables

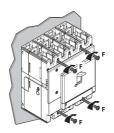
#### 5.2 Mounting

(see instruction sheet for detailed mounting procedures)

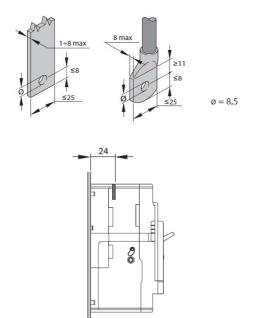


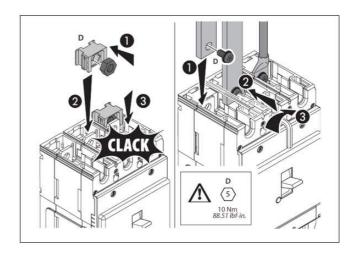


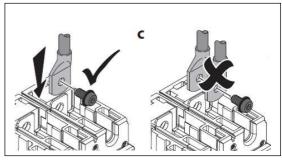




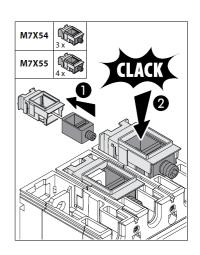
#### Busbars/cable lugs:

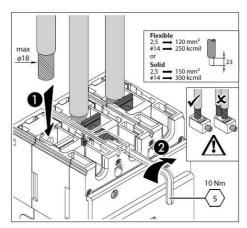






Cables:





Reference(s):

see in the relative tables

#### 6. ELECTRICAL AND MECHANICAL CHARACTERISTICS

Circuit Breaker	DPX <sup>3</sup> 250 HP F/N/H/L
	(36kA, 50kA, 70kA, 100kA)
Rated current (A)	40-100-160-250
Poles	3 - 4
Pole pitch (mm)	35
Rated insulation voltage (50/60Hz) U <sub>I</sub> (V)	800
Rated operating voltage (50/60Hz) U <sub>e</sub> (V)	690
Rated impulse withstand current U <sub>Imp</sub> (kV)	8
Rated frequency (Hz)	50 - 60
Operating temperature (°C)	-25 ÷ 70
Mechanical endurance (cycles)	12000
Mechanical endurance with motor control (cycles)	12000
Electrical endurance at In (cycles)	6000
Electrical endurance at 0.5 I <sub>n</sub> (cycles)	6000
Utilization category	A
Suitable for isolation	Yes
Type of protection	Electronic (with knobs)
Thermal adjustment I <sub>r</sub>	(0.4÷1) x l <sub>n</sub>
Magnetic adjustment I <sub>sd</sub> (**)	(1,5÷10) x I <sub>r</sub>
Neutral protection for 4P (%lth of phase	0FF-50 <sup>(*)</sup> -100
pole)	
Dimensions (W x H x D) (mm)	105 x 165 x 86 (3P)
	140 x 165 x 86 (4P)

(\*) if  $I_n$ =40A, then 50% regulation is allowed only if  $I_r \ge 0.8$ 

(\*\*) Regulations not adjustable:

- t<sub>r</sub>=5s
- t<sub>sd</sub>=0.1s
- /i=3250A

When  $I_r < 0.8$ , knob setting marked with 50% equals to a 100% value.

Protection against overloads:

- Ir adjustable from 0.4 to 1 x In
- tr adjustable from 3 to 15s

Protection against short circuits:

- Isd adjustable from 1.5 to 10 x lr
- tsd adjustable from 0 to 0.5s

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.

#### General remarks on protection unit

The protection units Li are normally supplied by the internal current transformers (CTs).

When the current flowing through the circuit breaker is greater than 12% of the maximum power (20% of In for single phase load), the internal current supply ensures all operation of the protection unit, included: LED status and diagnostic functions (e.g. trip test).

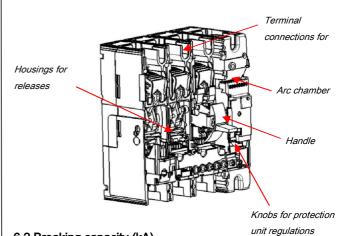
To ensure the same performance when the load is less than 12% of the maximum power (20% of In for single phase load) to grant complete functions, the following optional power supply can be used:

 power supply temporarily connected to frontal Service port, connected to specific adapter for PC (Legrand use only)

Together with above protections, activated in case of electric faults, the trip unit also integrates self-protection for:

- Over temperature : in case the internal temperature of protection unit exceed 95°C;
- Auto diagnostics: in case embedded watchdog circuit detects internal malfunctions, which could compromise the correct working of microcontroller.

#### 6.1 Main parts constituting the circuit breaker



#### 6.2 Breaking capacity (kA)

	g capacity (it t)				
		Br	eaking capa	city (kA) &	I <sub>cs</sub>
			3P-	4P	
	U <sub>e</sub> /I <sub>cu</sub> (I <sub>cu</sub> letter)	36kA (F)	50kA (N)	70kA (H)	100kA (L)
	220/240 V AC	70	90	100	150
	380/415 V AC	36	50	70	100
	440/460 V AC	25	30	40	50
IEC 60947-2	480/500 V AC	16	18	30	35
TEC 00947-2	550 V AC	10	12	22	25
	690V AC	7	8	20	22
	I <sub>cs</sub> (% I <sub>cu</sub> )	100	100	100	100
	Rated m	making capacity under short circuit I <sub>cm</sub>			
	I <sub>cm</sub> (kA) at 415V	76.5	105	154	220
•	220/240 V AC	70	90	100	150
NEMA AB-1	480/500 V AC	16	18	30	35
	690 V AC	7	8	20	22

Reference(s):

see in the relative tables

#### 6.3 Rated current (In)

	F	Phases limit trip current			
	therm	nal (I <sub>r</sub> )	magne	etic (I <sub>sd</sub> )	
I <sub>n</sub> (A)	0.4 × I <sub>n</sub> 1 × I <sub>n</sub>		min	max	
40	16	40	60	400	
100	40	100	150	1000	
160	64	160	240	1600	
250	100	250	375	2500	

#### 6.4 Load operations

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

#### 6.5 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 <sub>cc</sub> (kA)	Maximum Distance (mm)
36	350
50	300
70	250
100	200

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.

#### 6.6 Power losses per pole under In

#### Circuit breaker

	Power losses per pole (W)			(W)
In (A)	40	100	160	250
Cage terminals	0.49	3.07	7.85	19.20
Lugs	0.45	2.80	7.17	17.50
Spreaders	0.38	2.36	6.04	14.70
Rear terminals	0.46	2.89	7.39	18.10

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.

#### **6.7 DERATINGS**

according to IEC/EN 60947-1

#### 6.7.1 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.

	Temperature Ta (°C)				
I <sub>n</sub> (A)	40	50	60	70	
40	40 40		40	40	
100	100	100	100	95	
160	160	160	160	155	
250	250	250	210	190	

For derating temperature with other configurations, see table A.

#### 6.7.2 Specific condition use

Climatic conditions

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

#### Pollution degree

for DPX<sup>3</sup> 250 HP circuit breakers, degree 3, according to IEC/EN 60947-2

#### 6.7.3 Altitude

Altitude derating for DPX3

Altitude (m)	2000	3000	4000	5000
U <sub>e</sub> (V)	690	590	520	460
I <sub>n</sub> (A)	1 x I <sub>n</sub>	0.98 x I <sub>n</sub>	0.93 x I <sub>n</sub>	0.9 x I <sub>n</sub>

Reference(s):

see in the relative tables

#### 7. CONFORMITY

Megatiker range of product concerning circuit-breakers and switch-disconnectors exceed compliance with the IEC/EN standard 60947-2 and 60947-3 respectively. Certification available by IECEE CB-scheme or LOVAG Compliance scheme.

Megatiker respect the European Directives REACh, RoHS, RAEE.

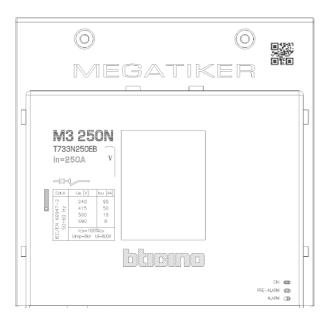
For specific information, please contact Legrand support.

#### 7.1 Marking

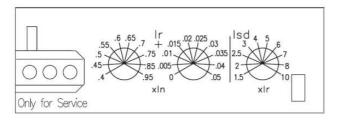
Product (circuit breakers) are provided with labelling in full conformity to the referred standard and directives requirements by laser or sticker labels (for illustrative purposes only) as:

#### Product laser label on front

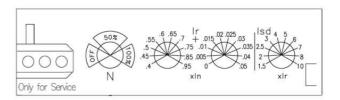
- -Manufacturer responsible
- -Denomination, type product, code
- -Standard conformity
- -Standard characteristics declared
- -Coloured identification of Icu at 415V



#### Electronic release label (3P version)



#### Electronic release label (4P version)



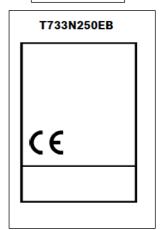
#### Product sticker label on side

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



#### Mark sticker label on side

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



#### Packaging sticker label

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



Reference(s):

see in the relative tables

#### 8. EQUIPMENTS AND ACCESSORIES

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

· shunt releases with voltage:

 12 Vac and dc
 ref. M7S012

 24 Vac and dc
 ref. M7S024

 48 Vac and dc
 ref. M7S048

 110÷130 Vac
 ref. M7S110

 220÷277 Vac
 ref. M7S230

 380÷480 Vac
 ref. M7S415

Maximum power = 400 VA / W

· undervoltage releases with voltage:

12 Vac and do ref. M7U012 24 Vac and dc ref. M7U024 ref. M7U048 48 Vac and do 110÷130 Vac and dc ref. M7U110 220÷240 Vac ref. M7U230 277 Vac ref. M7U277 380÷415 Vac ref. M7U415 440÷480 Vac ref. M7U480

Maximum power = 4 VA

Circuit breaker opening time < 50 ms

UVR releases can be used on Megatiker M3 125/250 starting from batch 19W15

• time-lag undervoltage releases (800 ms)

Time-lag modules with voltage:

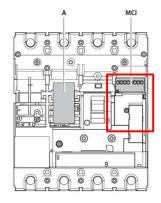
230 V ac ref. M7000MR/230 400 V ac ref. M7000MR/400

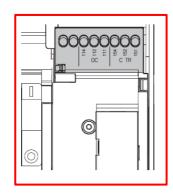
Release ref. M7UEM

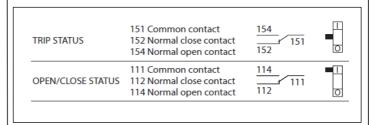
(to be equipped with a time-lag module M7000MR/230 e and M7000MR/400)

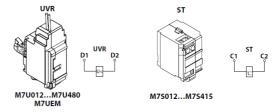
#### 8.2 Auxiliary contacts

For version of Megatiker M3 electronic version, auxiliary contacts are integrated inside module M.C.I (see instruction sheet for details). Here a connection scheme to get auxiliary functionality:









	Α
UVR	<b>✓</b>
ST	<b>√</b>

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

Reference(s):

see in the relative tables

#### 8.4 Rotary handles

Direct (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. 4 238 05 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

#### 8.5 Motor operators

For synchronized operations (energy storage type):

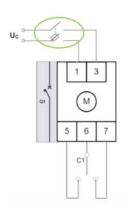
24 Vac and dc
 48 Vac and dc
 110 Vac
 230 Vac
 ref. M7M024
 ref. M7M010
 ref. M7M110
 ref. M7M230

#### Technical parameters:

Valtana	Duna anto	Α	C	DC		
Voltage	Property	Opening	Closing	Opening	Closing	
	Maximum inrush power (VA)	75	430	55	320	
24)/ /	Rated power (VA)	45	-	20	-	
24V ac/dc	Absorption time (s)	2.8	0.01	3.3	0.01	
	Operating current time (s)	1.1	0.03	1.2	0.03	
	Maximum inrush power (VA)	85	1000	70	690	
48V ac/dc	Rated power (VA)	65	,	15	-	
46V ac/uc	Absorption time (s)	3.3	0.006	3.8	0.006	
	Operating current time (s)	1.1	0.02	1.3	0.02	
	Maximum inrush power (VA)	95	600	-	-	
110V ac	Rated power (VA)	60	-	-	-	
110V ac	Absorption time (s)	3	0.02	-		
	Operating current time (s)	1.0	0.03	-	-	
	Maximum inrush power (VA)	125	460	-	-	
230V ac	Rated power (VA)	70	-	-	-	
250V at	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:



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 M3 125/160/250)

Sealable terminal shields:

Set of 2 (for 3P) ref. M7C22

o Set of 3 (for 4P) *ref. M7C23* 

Insulated shields:

(ref. M7F01 and M7F02 are compatible with Megatiker M3 125/160 also)

#### 8.7 Connection accessories

#### Cage terminals

 Set of 3 terminals for cables 150 mm² max (solid) ref. M7X54 or 120 mm² max (flexible) Cu/Al

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

Spreaders (incoming or outcoming):

Rear terminals (incoming or outcoming):

 Set of 3 (for 3P)
 ref. M7A56

 Set of 4 (for 4P)
 ref. M7A57

#### Cage terminal use specifications

Megatiker M3 250									
Type of cage	Cable standard suggested cross section (mm²)*			Dimensions limits of cable fo cage terminals					
terminal		MIN cr			MAX cross				
	In (A)	Cu	Al	section (mm²)		section			
				Flexible	Rigid	Flexible	Rigid		
	16	2,5	4		2,5	120	150		
	20	2,5	4						
	25	4	6						
	32	6	10						
	40	10	16						
	50	10	16						
Standard	63	16	25	2,5					
	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)

Reference(s):

see in the relative tables

#### 8.8 Plug-in version

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

#### Rases

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

•	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 Megatiker M3 250 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 3P ref. M7B54 transformation kit for 4P ref. M7B55

#### Fontal 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. M7B65
 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. M7B05
- 6 contact connector (under sliding contacts) ref. F15/7500P6

(Ref. F15/7500P6 can be used with both plug-in and draw-out version)

#### 8.10 Interlock mechanism

(for interlocking 2 Megatiker M3 125/160 HP or 2 Megatiker M3 250 breakers)

No frame mixing in interlock mechanism

- Interlock mechanism standard version ref. M7I01 (for fixed version DPX<sup>3</sup> 125 HP and DPX<sup>3</sup> 250 HP)
- Interlock mechanism for electronic module ref. M7102 (for fixed version DPX<sup>3</sup> 125 HP and DPX<sup>3</sup> 250 HP)
- Interlock plate for DPX<sup>3</sup> 250 HP ref. M7I05
- Rear interlock mechanism ref. M7103
   (for Megatiker M3 250 plug-in and/or draw-out version)

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

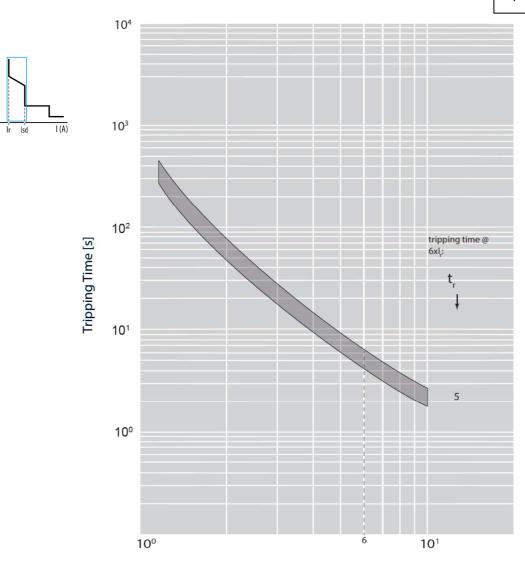
Reference(s):

see in the relative tables

#### 9. CURVES

#### 9.1.1 Tripping curve [ 1/3 ]

Update: 11/06/2019



 $I/I_r$   $I_{cu} = 36-50-70-100 \text{ kA} \quad I_{max} = 250A \quad 3-4 \text{ P} \quad U_e = 415 \text{Vac} \quad (IEC/EN 60947-2)$ 

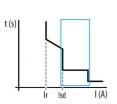
Value	Description
t	time
1	current
l <sub>r</sub>	long time setting current
t <sub>r</sub>	long time delay
Isd	short time setting current
tsd	short time delay
li	instantaneous release
lcu	rated ultimate short-circuit breaking capacity
I <sup>2</sup> t = K	constant pass-through energy setting
t = K	constant tripping time setting
	long time trip curve
	short time trip curve
Current tolerance	10% up to $I_{sd}$ ; 20% up to $I_i$

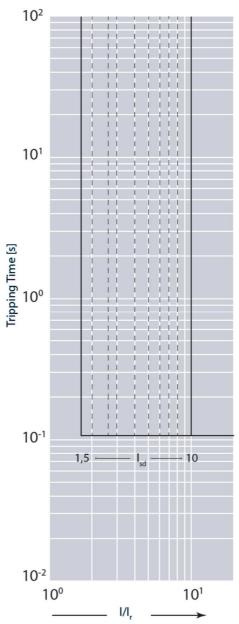
Reference(s):

see in the relative tables

#### 9.1.2 Tripping curve [ 2/3 ]

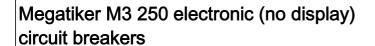
Update: 11/06/2019





 $I_{cu}$  = 36-50-70-100 kA  $I_{max}$  = 250A 3-4 P  $U_{e}$  = 415Vac (IEC/EN 60947-2)

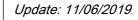
Value	Description
t	time
I	current
l <sub>r</sub>	long time setting current
t <sub>r</sub>	long time delay
Isd	short time setting current
tsd	short time delay
li	instantaneous release
lcu	rated ultimate short-circuit breaking capacity
$I^2t = K$	constant pass-through energy setting
t = K	constant tripping time setting
	long time trip curve
	short time trip curve
Current tolerance	10% up to I <sub>sd</sub> ; 20% up to I <sub>i</sub>

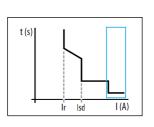


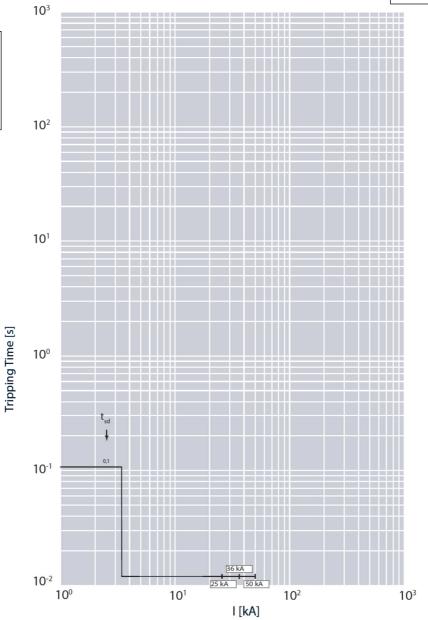
Reference(s):

see in the relative tables

#### 9.1.3 Tripping curve [ 3/3 ]







 $I_{cu}$  = 36-50-70-100 kA  $I_{max}$  = 250A 3-4 P  $U_e$  = 415Vac (IEC/EN 60947-2)

#### Fixed Instantaneous override Ist = 3.25kA

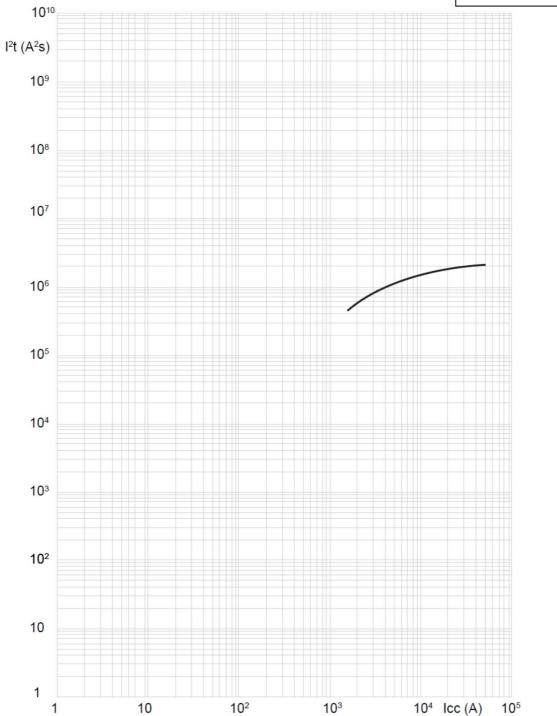
Value	Description
t	time
I	current
l <sub>r</sub>	long time setting current
t <sub>r</sub>	long time delay
Isd	short time setting current
tsd	short time delay
li	instantaneous release
lcu	rated ultimate short-circuit breaking capacity
I <sup>2</sup> t = K	constant pass-through energy setting
t = K	constant tripping time setting
	long time trip curve
	short time trip curve
Current tolerance	$10\%$ up to $I_{sd}$ ; $20\%$ up to $I_i$

Reference(s):

see in the relative tables



Update: 30/08/2019



 $I_{cu}$  = 36-50 kA  $I_{max}$  = 250A 3-4 P  $U_{e}$  = 415Vac (IEC/EN 60947-2)

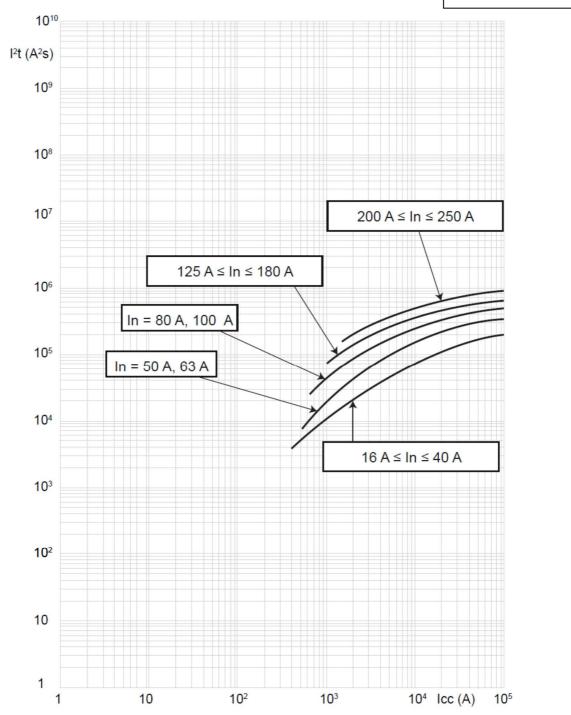
Value Description						
I <sub>cc</sub>	short circuit current					
I <sup>2</sup> t (A <sup>2</sup> s)	pass-through specific energy					

Reference(s):

see in the relative tables



Update: 20/11/2020



I<sub>cu</sub> = 70-100 kA I<sub>max</sub> = 250A 3-4 P U<sub>e</sub> = 415Vac (IEC/EN 60947-2)

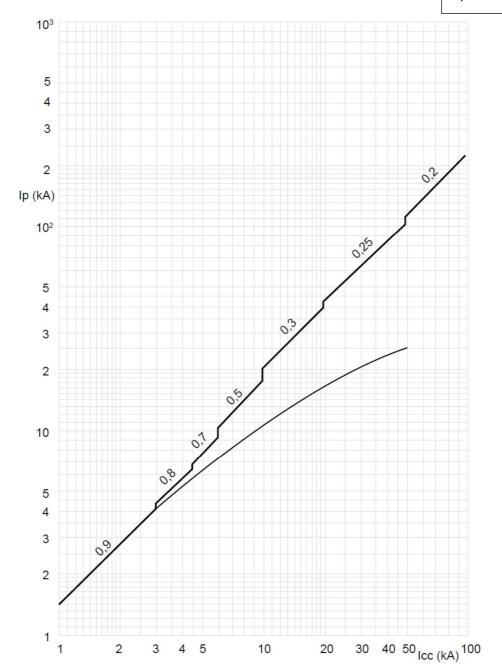
ı	Value Description						
I <sub>cc</sub> short circuit current							
	I <sup>2</sup> t (A <sup>2</sup> s)	pass-through specific energy					

Reference(s):

see in the relative tables

#### 9.3.1 Cut-off peak current characteristic curve (breaking capacity Icu <= 50kA)

Update: 30/08/2019

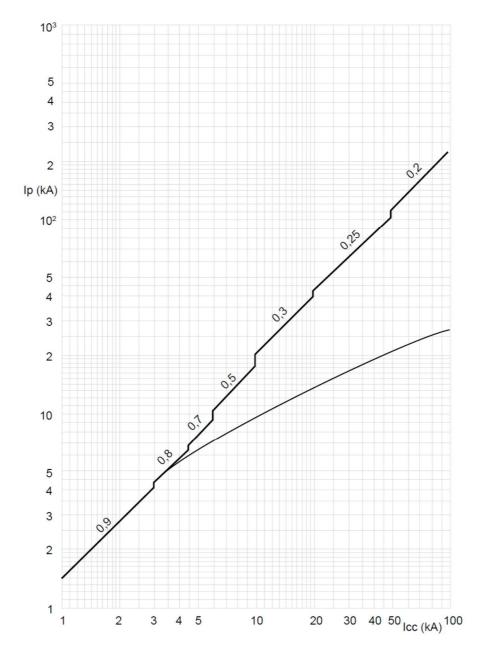


 $I_{cu} = 36-50 \text{ kA}$   $I_{max} = 250 \text{A}$  3-4 P  $U_e = 415 \text{Vac}$  (IEC/EN 60947-2)

Value	Description							
I <sub>cc</sub>	estimated short circuit symmetrical current (RMS value)							
I <sub>p</sub>	I <sub>p</sub> maximum short circuit peak current							
	maximum prospective short circuit peak current							
	corresponding at the power factor							
	maximum real peak short circuit current							

#### 9.3.2 Cut-off peak current characteristic curve (breaking capacity Icu > 50kA)

Update: 20/11/2020



 $I_{cu}$  = 70-100 kA  $I_{max}$  = 250A 3-4 P  $U_{e}$  = 415Vac (IEC/EN 60947-2)

Value	Description						
I <sub>cc</sub>	estimated short circuit symmetrical current (RMS value)						
I <sub>p</sub>	maximum short circuit peak current						
	maximum prospective short circuit peak current						
	corresponding at the power factor						
	maximum real peak short circuit current						

Reference(s):

see in the relative tables

#### A) Derating Temperature and configurations

		Ambient temperature								
	30 °C		40 °C 50 °		°C	60	60 °C		°C	
Fixed version	I <sub>max</sub> (A) I <sub>r</sub> / I <sub>n</sub> I		I <sub>max</sub> (A)	$I_r / I_n$	I <sub>max</sub> (A)	$I_r / I_n$	I <sub>max</sub> (A)	$I_r / I_n$	I <sub>max</sub> (A)	$I_r / I_n$
Cage terminals, flexible cable	250	1	250	1	230	0.92	210	0.84	190	0.76
Cage terminals, flexible cable + sealable terminal shields	250	1	238	0.95	200	0.80	175	0.70	175	0.70
Lugs, flexible cable	250	1	213	0.85	200	0.80	200	0.80	150	0.60
Spreaders, flexible cable	250	1	250	1	200	0.80	175	0.70	163	0.65
Rear terminals, flexible cable	250	1	213	0.85	188	0.75	163	0.65	163	0.65
Plug-in/draw-out version	I <sub>max</sub> (A)	I <sub>r</sub> / I <sub>n</sub>	I <sub>max</sub> (A)	I <sub>r</sub> / I <sub>n</sub>	I <sub>max</sub> (A)	I <sub>r</sub> / I <sub>n</sub>	I <sub>max</sub> (A)	I <sub>r</sub> / I <sub>n</sub>	I <sub>max</sub> (A)	$I_r / I_n$
Cage terminals, flexible cable	250	1	238	0.95	238	0.95	233	0.93	225	0.90

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