

## EPIC® MC series

### Modular inserts for custom configurations



The EPIC® MC modular series connector can be custom-configured to meet application requirements by combining a variety of standard plug-and-play modules within various size support frames. Configurations include contacts for power and control, thermocouple contacts, data modules for PROFIBUS® and Ethernet, and pneumatic modules.

PROFIBUS® is a registered trademark of the PNO (PROFIBUS User Organization).

#### Technical data

<b>Number of contacts:</b>	1 - 280 (+PE)	<b>Rated voltage:</b>	
		- UL/CSA:	100 - 600V
		- IEC:	30 - 1000V
<b>Temperature range:</b>	-40°C to +100°C	<b>Rated current:</b>	
- short-term:	up to +125°C	- UL/CSA:	4 - 82A
		- IEC:	1 - 220A
<b>Pollution level:</b>	3	<b>Wire size:</b>	
<b>Mating cycles:</b>	- per DIN EN 61984:2008 Service Life Test: Tested to 100 cycles and passed - per Contact Thermal Test: Useful service up to 500 cycles is possible at rated voltage and current*	- screw termination:	8 - 4 AWG (10 - 25 mm <sup>2</sup> )
		- crimp termination:	30 - 4/0 AWG (0.06 - 95 mm <sup>2</sup> )
		- cage clamp:	20 - 14 AWG (0.5 - 2.5 mm <sup>2</sup> )
		<b>Contact material:</b>	silver- or gold-plated copper alloy
		<b>Contact resistance:</b>	< 1 mΩ - < 5 mΩ

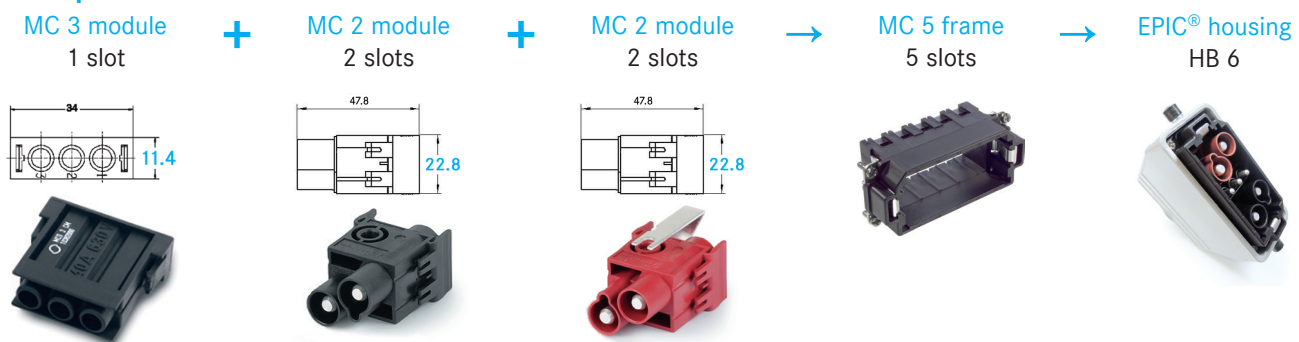
\* In dry, non-conductive, non-corrosive environments when protected in a housing rated at least IP54 and disconnected for cycling and maintenance only.

### Assembly Instructions

EPIC® MC modular inserts are composed of two parts: one or more modules and a frame, which are then installed in an EPIC® housing unit.

MC modules occupy either one or two slots in an MC frame. Single-slot modules are 11.4 mm wide. Double-slot modules are 22.8 mm wide. Most modules require a removal tool to remove from the frame. EPIC® MC 2 modules can be removed manually.

#### example:



# EPIC® MC quick select

Number of contacts	Module	Description	Plug	Receptacle	Rated voltage	Rated current	Removal tool needed	Page
1	EPIC® MC HHC1	high current	44424030	44424031	1000V	220A	no	356
2	EPIC® MC HC2		44424012	44424013	1000V	65A	no	354
2	EPIC® MC HHC2	high current	44424017	44424018	1000V	150A	no	355
2	EPIC® MC 2	2 working contacts	10344100	10345100	1000V	82A	no	353
2	EPIC® MC 2	1 working contact + 1 ground	10344600	10345600	1000V	82A	no	353
3	EPIC® MC 3 Coax	coax module	10399200	10399300	250V	—	yes	357
3	EPIC® MC 3	3 contacts	10382000	10382100	630V	40A	yes	358
3	EPIC® MC 3 High Voltage	high voltage	10399800	10399900	1000V	50A	yes	359
4	EPIC® MC 4 HE	HE module	10399000	10399100	630V	25A	no	360
4+PE	EPIC® MC 4+PE High Voltage	high voltage + ground	10383200	10383300	1000V	16A	yes	361
5	EPIC® MC 5	5 contacts	10382200	10382300	400V	20A	yes	362
10	EPIC® MC 10	with machined contacts	10382400	10382500	250V	10A	yes	363
10	EPIC® MC 10	with stamped & formed contacts	10383400	10383500	250V	10A	yes	363
20	EPIC® MC 20	low voltage	10383600	10383700	100V	4A	yes	365
0	EPIC® MC Dummy	dummy module	10399400	10399500	—	—	yes	366
4	EPIC® MC Cage Clamp	cage clamp module	10399600	10399700	400V	14A	yes	366
2 + shield	EPIC® MC PROFIBUS DP	for PROFIBUS® DP	10390400	10390500	30V	1A	no	367
4 + RJ45	EPIC® MC Ethernet	RJ45 connector + 4 power contacts	10344300	10345300	600V	10A	yes	369
4 + shield	EPIC® MC Universal Bus	universal bus	10390600	10390700	30V	1A	no	367
8 + shield	EPIC® MC BUS	universal bus	10390410	10390411	50V	10A	no	368
1	EPIC® MC Pneumatic	pneumatic hose with 2.5 mm diameter	44424004	44424005	145 psi	—	yes	370
1	EPIC® MC Pneumatic	pneumatic hose with 4 mm diameter	44424006	44424007	145 psi	—	yes	370
2	EPIC® MC Pneumatic	pneumatic hose with 2.5 mm diameter	44424008	44424009	145 psi	—	yes	370
2	EPIC® MC Pneumatic	pneumatic hose with 4 mm diameter	44424010	44424011	145 psi	—	yes	370

## EPIC® MC frames

Number of modules	Plug	Receptacle	Housing	Page
2	10381000	10381100	HB 6	371
3	10381200	10381300	HB 10	371
5	10381400	10381500	HB 16	372

Number of modules	Plug	Receptacle	Housing	Page
7	10381600	10381700	HB 24	372
10	10381400 (x2)	10381500 (x2)	HB 32	373
14	10381600 (x2)	10381700 (x2)	HB 48	373

## EPIC® MC module removal tool



For removing certain EPIC® MC series modules from module mounting frames: MC 3, 4+PE, 5, 10 & 20 contact modules; dummy; cage clamp; Ethernet & pneumatic modules. Other modules can be removed manually.

Part number
11171200

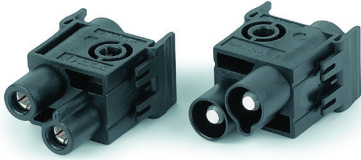
### Approvals



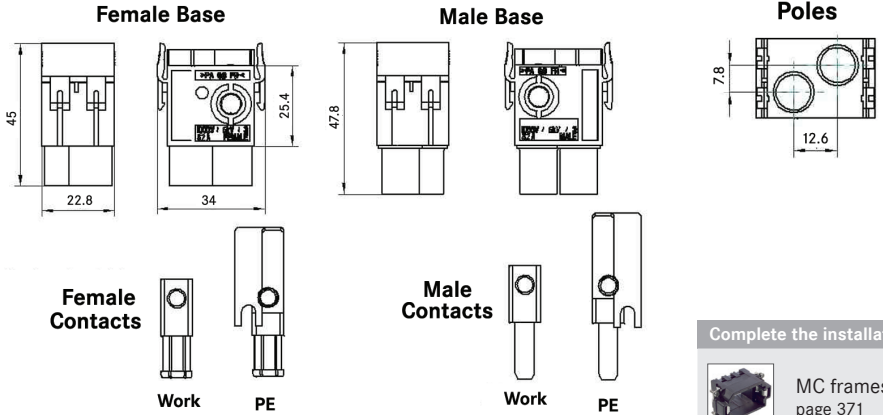
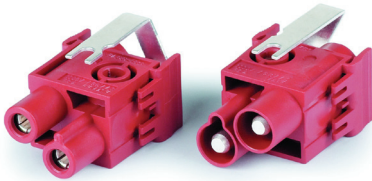
# EPIC® MC 2

## 2-position module with protected ground for high power transmission

2 working contacts



1 working contact + 1 ground



all dimensions are in mm

Complete the installation



MC frames  
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### Usage notes

- Module can be inserted into the standard EPIC® modular frames
- Module can be inserted or removed from the frame without a tool, due to snap hooks
- Module takes up two slots in the modular frame
- High current modules require the usage of high profile EPIC® HB 16 & 24 housings
- Wire end ferrules are recommended for use with 6 & 8 AWG stranded wire

### Application advantage

- Screw contact modules can be wired easily with a standard screwdriver
- Flexibility of the modular series allows the arrangement of modules to fit requirements

### Approvals



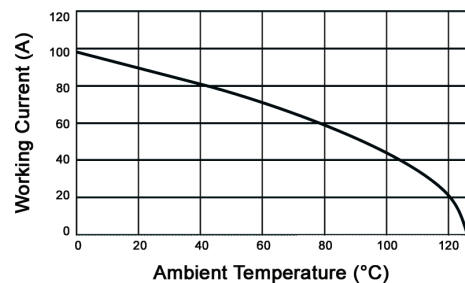
### Technical data

<b>Temperature range:</b>	-40°C to + 100°C	<b>Termination:</b>	screw
<b>Mating cycles:</b>	100 (higher mating cycles depending on the application)	<b>Wire size:</b>	8 - 4 AWG (10 - 25 mm <sup>2</sup> ) (crimped terminal ends required for 4 AWG wire)
<b>Rated voltage:</b>		<b>Contact material:</b>	brass; 2µ nickel & 2 - 3µ silver
- UL/CSA:	600V	<b>Contact resistance:</b>	1.5 - 4 mΩ
- IEC:	1000V		
<b>Rated current:</b>	82A		

Description	Wire protection	# of slots in frame	Plug	Receptacle
2 working contacts	no	2	10344100	10345100
1 working contact + 1 ground	no	2	10344600	10345600

### Derating curve

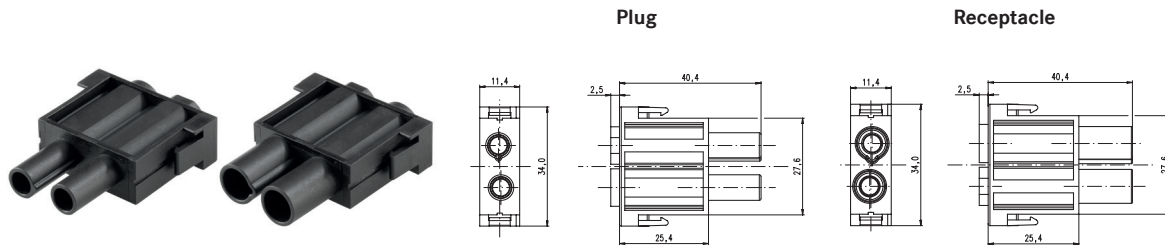
10 AWG (6 mm<sup>2</sup>)



If not otherwise specified, all values relating to the product are nominal values. Photographs are not to scale and are not true representations of the products in question.

# EPIC® MC HC2

Compact 2-position module for high current transmission



contacts sold separately, see below

all dimensions are in mm

### Technical data

Temperature range:	-40°C to +125°C
Rated voltage:	1000V
Rated current:	65A
Wire size:	6 AWG (16 mm <sup>2</sup> )

### Complete the installation



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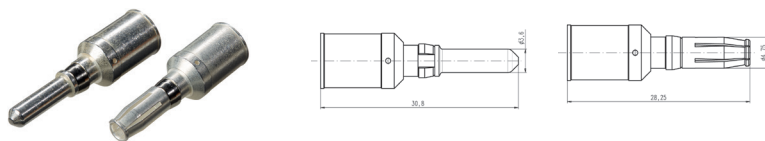
### Approvals



Termination	# of slots in frame	Plug	Receptacle	Contact size
crimp termination	1	44424012	44424013	3.6 mm

## 3.6 mm contacts 6 AWG

Machined contacts for EPIC® MC series modules



Contact size		Bag of 100 silver contacts	
mm <sup>2</sup>	AWG	pin	socket
16	6	44424014	44424015

### Complete the installation



Crimp tool:  
11147000



Crimp dies:  
11147111



Locator:  
11147210

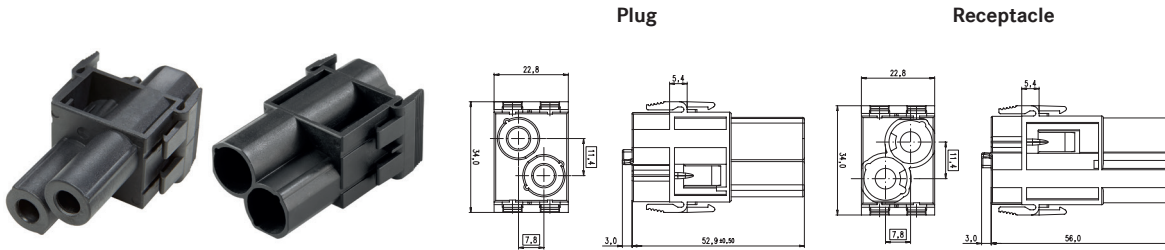


Removal tool:  
11171100

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# EPIC® MC HHC2

## 2-position module for high current transmission



contacts sold separately, see below

all dimensions are in mm

### Technical data

Temperature range:	-40 °C to +125 °C
Rated voltage:	1000V
Rated current:	150A
Wire size:	6 - 1 AWG (16 - 35 mm <sup>2</sup> )

### Complete the installation



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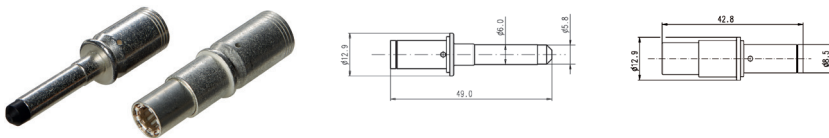
### Approvals



Termination	# of slots in frame	Plug	Receptacle	Contact size
crimp termination	2	44424017	44424018	6 mm

## 6 mm contacts

### Machined contacts for EPIC® MC series modules



Contact size		Bag of 20 silver-plated contacts		Pack size
mm <sup>2</sup>	AWG	pin	socket	
16	6	44424019	44424022	20
25	4	44424020	44424023	20
35	1	44424021	44424024	20

### Complete the installation



Crimp dies:

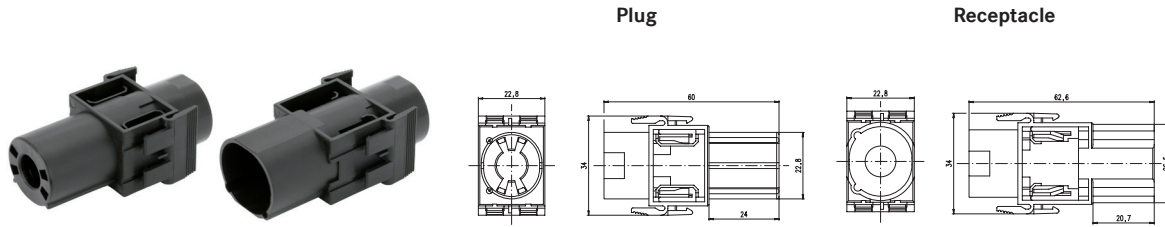
16 mm <sup>2</sup> :	44424025
25 mm <sup>2</sup> :	44424026
35 mm <sup>2</sup> :	44424027

use with hydraulic crimp tool Klauke type EK 60/22-L

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# EPIC® MC HHC1

1-position module for extremely high current transmission



contacts sold separately, see below

all dimensions are in mm

### Technical data

Temperature range:	-40°C to +125°C
Rated voltage:	1000V
Rated current:	220A
Wire size:	1/0 - 4/0 AWG (50 - 95 mm <sup>2</sup> )

### Complete the installation



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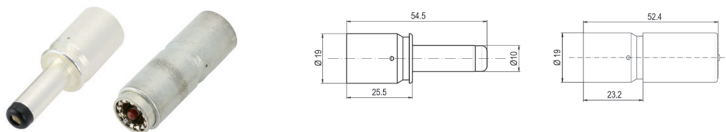
### Approvals



Termination	# of slots in frame	Plug	Receptacle	Contact size
crimp termination	2	44424030	44424031	10 mm

## 10 mm contacts

Machined contacts for EPIC® MC series modules



Contact size		Silver-plated contacts		Pack size
mm <sup>2</sup>	AWG	pin	socket	
50	1/0	44424032	44424035	1
70	2/0	44424033	44424036	1
95	3/0	44424034	44424037	1

### Complete the installation



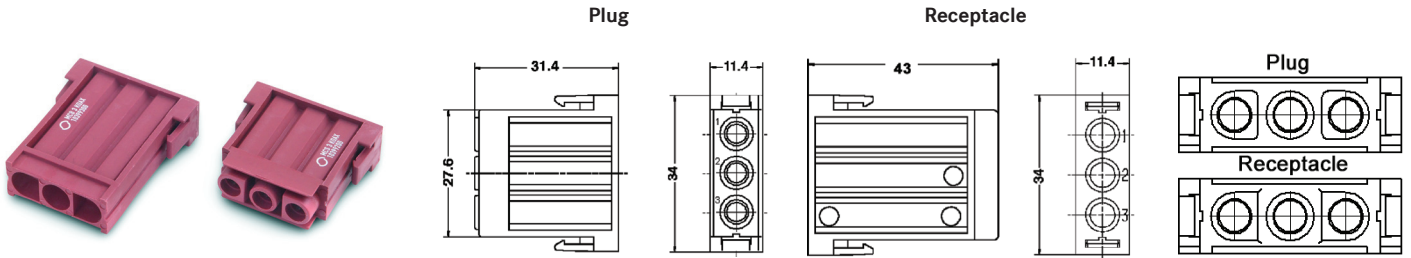
Crimp dies:	
50 mm <sup>2</sup> :	44424038
70 mm <sup>2</sup> :	44424039
95 mm <sup>2</sup> :	44424040

use with hydraulic crimp tool Klauke type EK 60/22-L

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# EPIC® MC 3 Coax

## 3-position module with coax contacts



contacts sold separately, see below

all dimensions are in mm

### Technical data

Temperature range:	-40°C to +100°C
Rated voltage:	250V

### Complete the installation



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### Approvals



Termination	# of slots in frame	Plug	Receptacle
solder & crimp termination	1	10399200	10399300

## Coax contacts



Cable type	Impedance	Pin	Socket
<b>Solder contacts</b>			
RG58 CU	50Ω	44429018	44429017
RG180 BU	75Ω	44429020	44429019
RG187 AU	75Ω	44429022	44429021
<b>Solder/crimp contacts</b>			
RG58	50Ω	11214200	11219200

### Complete the installation



Crimp tool:  
11147000



Crimp dies:  
11147130



Removal tool:  
11171100

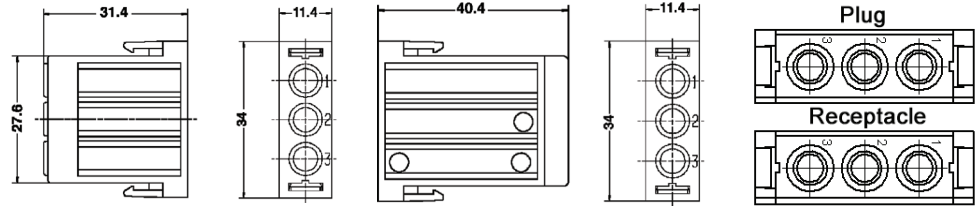
If not otherwise specified, all values relating to the product are nominal values.  
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# EPIC® MC 3

3-position module for high current transmission

Plug

Receptacle



contacts sold separately, see below

all dimensions are in mm

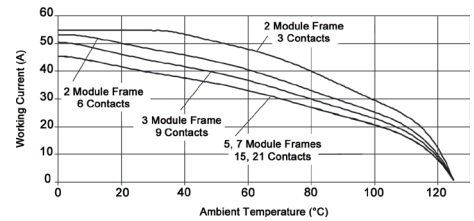
### Technical data

Temperature range:	-40°C to +100°C
Rated voltage:	630V
Rated current:	40A
Wire size:	16 - 8 AWG (1.5 - 10 mm <sup>2</sup> )

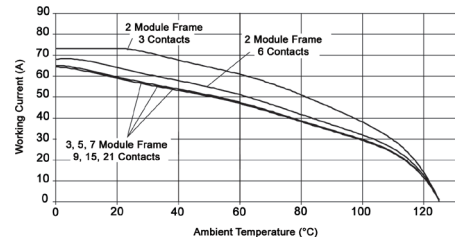
### Complete the installation

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- Module removal tool 11171200

### Derating curve 10 AWG (6 mm<sup>2</sup>)



### 8 AWG (10 mm<sup>2</sup>)



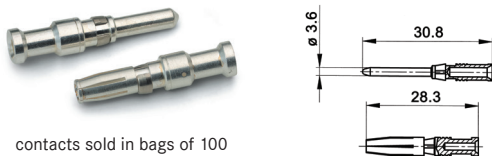
Termination	# of slots in frame	Plug	Receptacle	Contact size
crimp termination	1	10382000	10382100	3.6 mm

### Approvals



## 3.6 mm contacts

Machined contacts for EPIC® MC series modules



contacts sold in bags of 100

Contact size		Stripping length mm	Bag of 100 silver contacts	
mm <sup>2</sup>	AWG		pin	socket
1.5	16	10	1121070C	1121570C
2.5	14	10	1121060C	1121560C
4.0	12	10	1121000C	1121500C
6.0	10	10	1121010C	1121510C
10.0	8	10	1121020C	1121520C

### Complete the installation



Crimp tool:  
11147000



Crimp dies:  
1.5-2.5 mm<sup>2</sup>: 11147110  
4.0-10 mm<sup>2</sup>: 11147120



Locator:  
11147210



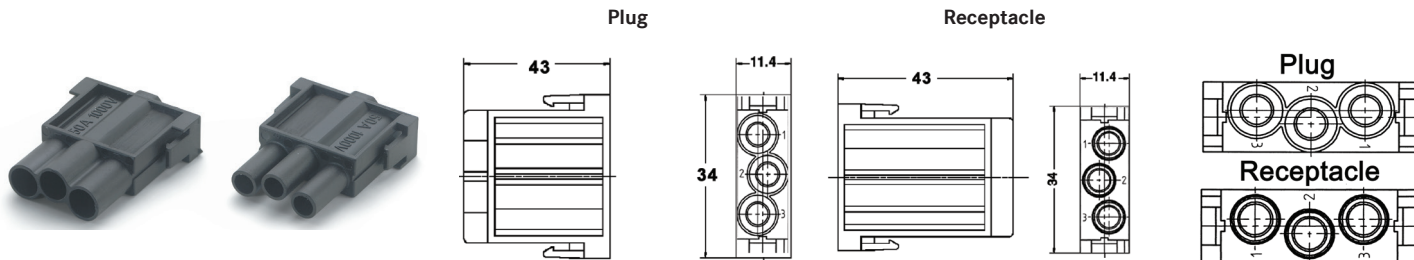
Removal tool:  
11171100

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# EPIC® MC 3 High Voltage

## 3-position module for high voltage transmission




contacts sold separately, see below

all dimensions are in mm

Technical data	
Temperature range:	-40°C to +100°C
Rated voltage:	1000V
Rated current:	50A
Wire size:	16 - 8 AWG (1.5 - 10 mm <sup>2</sup> )

Complete the installation



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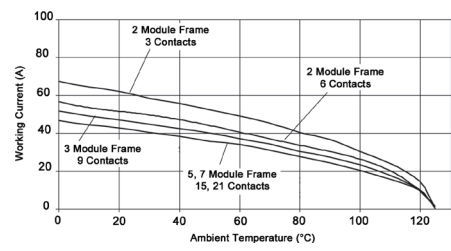
Approvals



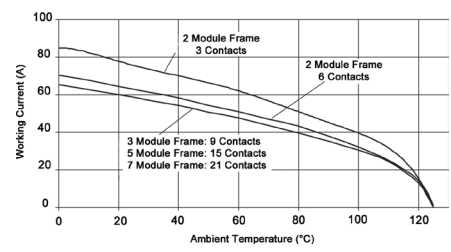
Termination	# of slots in frame	Plug	Receptacle	Contact size
crimp termination	1	10399800	10399900	3.6 mm

### Derating curve

#### 10 AWG (6 mm<sup>2</sup>)

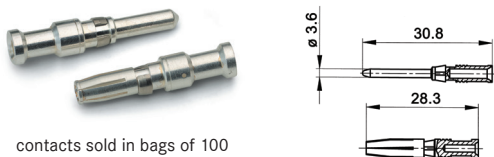


#### 8 AWG (10 mm<sup>2</sup>)



## 3.6 mm contacts





### Machined contacts for EPIC® MC series modules



contacts sold in bags of 100

Contact size		Stripping length mm	Bag of 100 silver contacts	
mm <sup>2</sup>	AWG		pin	socket
1.5	16	10	1121070C	1121570C
2.5	14	10	1121060C	1121560C
4.0	12	10	1121000C	1121500C
6.0	10	10	1121010C	1121510C
10.0	8	10	1121020C	1121520C

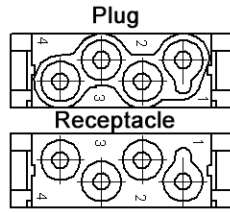
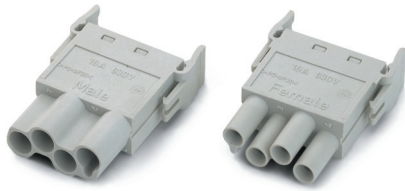
Complete the installation

 Crimp tool: 11147000	 Crimp dies: 1.5 - 2.5 mm <sup>2</sup> : 11147110 4.0 - 10 mm <sup>2</sup> : 11147120	 Locator: 11147210	 Removal tool: 11171100
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# EPIC® MC 4 HE

4-position module for medium current transmission



contacts sold separately, see below

### Technical data

Temperature range:	-40°C to +100°C
Rated voltage:	630V
Rated current:	25A
Wire size:	20 - 12 AWG (0.5 - 4 mm <sup>2</sup> )

### Complete the installation



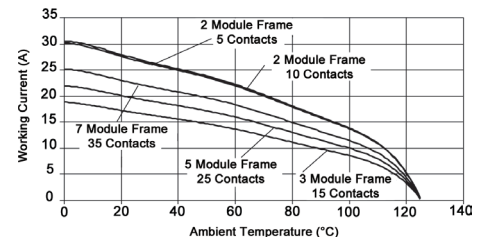
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### Approvals

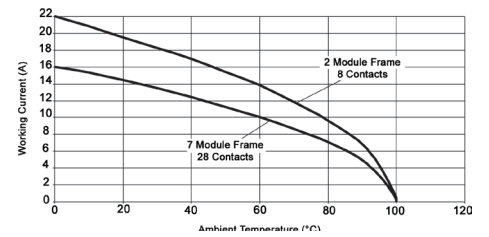


### Derating curve

14 AWG (2.5 mm<sup>2</sup>)



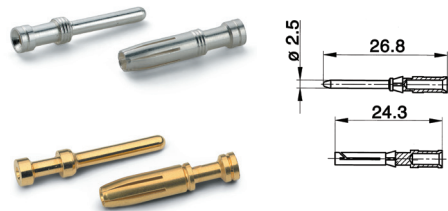
12 AWG (4 mm<sup>2</sup>)



Termination	# of slots in frame	Plug	Receptacle	Contact size
crimp termination	1	10399000	10399100	2.5 mm

## 2.5 mm contacts

Machined contacts for EPIC® MC series modules



Contact size	AWG	Stripping length (mm)		# of marking tracks	Bag of 100 silver contacts		Bag of 100 gold contacts	
		pin	socket		pin	socket	pin	socket
0.5	20	7.4	7.3	—	11190000	11195000	11192000	11197000
0.75 - 1.0	18	7.4	7.3	1	11190100	11195100	11192100	11197100
1.5	16	7.4	7.3	2	11190200	11195200	11192200	11197200
2.5	14	7.4	7.3	3	11190300	11195300	—	—
4.0	12	7.4	7.3	—	11190400	11195400	—	—

### Complete the installation



Crimp tool:  
11147000



Crimp dies:  
11147100



Locator:  
11147200



Removal tool:  
11182500

contacts sold in bags of 100



If not otherwise specified, all values relating to the product are nominal values. Photographs are not to scale and are not true representations of the products in question.

# EPIC® MC 4+PE High Voltage

4-position module with ground for high voltage applications





contacts sold separately, see below

### Technical data

Temperature range:	-40 °C to +100 °C
Rated voltage:	1000V
Rated current:	16A
Wire size:	20 - 14 AWG (0.5 - 2.5 mm <sup>2</sup> )

### Complete the installation

-  MC frames  
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-  Module removal tool  
11171200

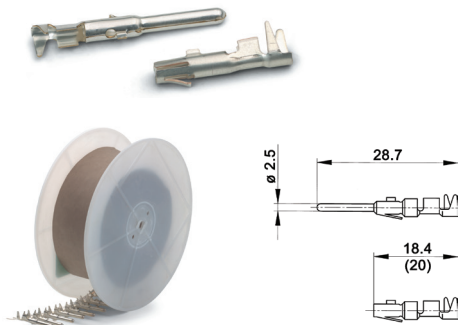
Termination	# of slots in frame	Plug	Receptacle	Contact size
crimp termination	1	10383200	10383300	2.5 mm

### Approvals









## 2.5 mm contacts

### Stamped & formed contacts for EPIC® MC series modules



contacts sold in bags of 100 or 1 reel

### Complete the installation

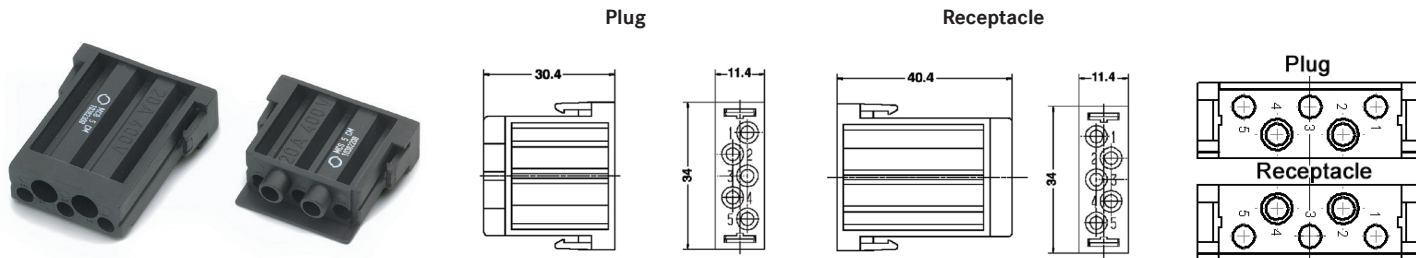
-  Crimp tool: 11147000
-  Locator: 11147300
-  Crimp dies:  
0.5 - 1.5 mm<sup>2</sup>: 11147180  
1.5 - 2.5 mm<sup>2</sup>: 11147190
-  Crimp tool for reel: 11153500
-  Removal tool: 11160000
-  Crimp dies for reel:  
0.5 - 1.5 mm<sup>2</sup>: 11153700  
1.5 - 2.5 mm<sup>2</sup>: 11153800

Contact size	Bag of 100 silver contacts		Reel of 100 silver contacts		Reel of 200 silver contacts			
	mm <sup>2</sup>	AWG	pin	socket	pin	socket	pin	socket
0.5 - 1.5	20 - 16		11201000	11205000	—	—	11208000	11209000
1.5 - 2.5	16 - 14		11202000	11206000	11208500	11209500	—	—

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# EPIC® MC 5

5-position module for medium current transmission



contacts sold separately, see below

all dimensions are in mm

### Technical data

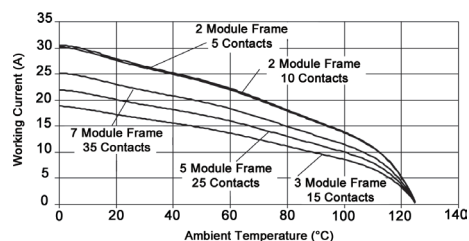
Temperature range:	-40°C to +100°C
Rated voltage:	400V
Rated current:	20A
Wire size:	20 - 12 AWG (0.5 - 4 mm <sup>2</sup> )

### Complete the installation

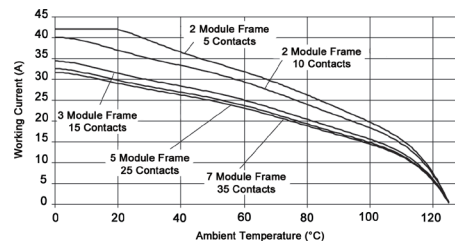
- MC frames page 371
- Module removal tool 11171200

### Derating curve

14 AWG (2.5 mm<sup>2</sup>)



12 AWG (4 mm<sup>2</sup>)



Termination	# of slots in frame	Plug	Receptacle	Contact size
crimp termination	1	10382200	10382300	2.5 mm

### Approvals



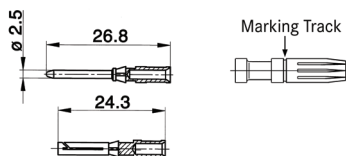
## 2.5 mm contacts

Machined contacts for EPIC® MC series modules



contacts sold in bags of 100

Contact size	Stripping length	# of marking tracks	Bag of 100 silver contacts	
			pin	socket
0.5	7.8	—	1121300C	1121800C
0.75 - 1.0	7.8	1	1121310C	1121810C
1.5	7.8	2	1121320C	1121820C
2.5	7.8	3	1121330C	1121830C
4.0	7.8	—	1121340C	1121840C



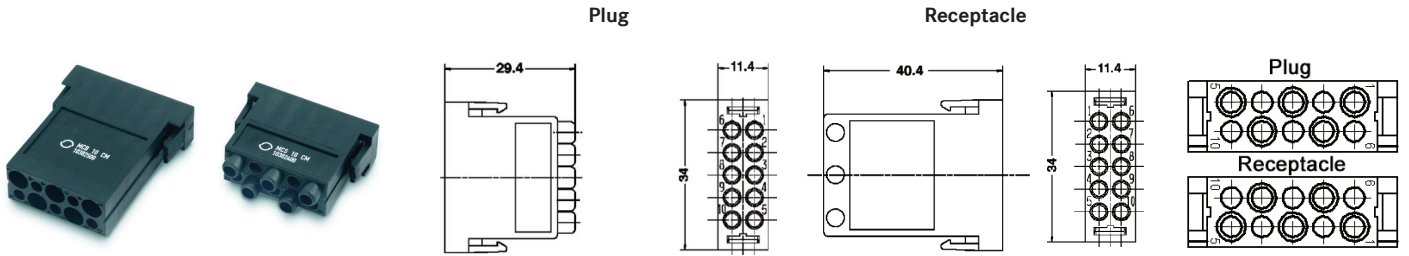
### Complete the installation

- Crimp tool: 11147000
- Crimp dies: 11147100
- Locator: 11147200
- Removal tool: 11171000

If not otherwise specified, all values relating to the product are nominal values. Photographs are not to scale and are not true representations of the products in question.

# EPIC® MC 10

10-position module for signal transmission



contacts sold separately, see below

all dimensions are in mm

Technical data	
Temperature range:	-40°C to +100°C
Rated voltage:	400V
Rated current:	10A
Wire size:	26 - 14 AWG (0.14 - 2.5 mm <sup>2</sup> )

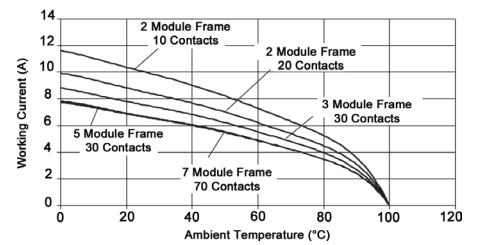
**Complete the installation**

- MC frames page 371
- Module removal tool 11171200

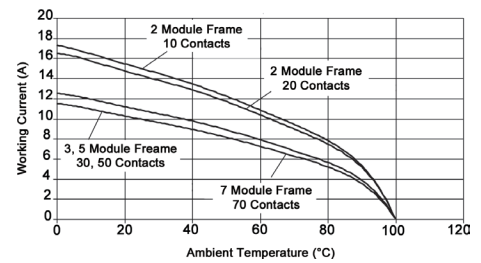
Termination	# of slots in frame	Plug	Receptacle	Contact size
crimp termination	1	10382400	10382500	1.6 mm

### Derating curve

20 AWG (0.5 mm<sup>2</sup>)



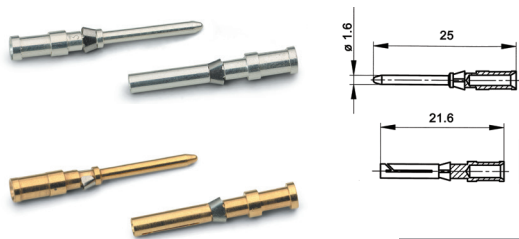
### 16 AWG (1.5 mm<sup>2</sup>)



**Approvals**

## 1.6 mm contacts

Machined contacts for EPIC® MC series modules



contacts sold in bags of 100

Contact size		Stripping length mm	# of marking tracks	Bag of 100 silver contacts		Bag of 100 gold contacts	
mm <sup>2</sup>	AWG			pin	socket	pin	socket
0.14 - 0.37	26 - 22	8	1	13162000	13163000	13162500	13163500
0.5	20	8	2	13162100	13163100	13162600	13163600
0.75 - 1.0	18	8	3	13162200	13163200	13162700	13163700
1.5	16	8	4	13162300	13163300	13162800	13163800
2.5	14	8	5	13162400	13163400	13162900	13163900

**Contact tools**

- Crimp tool: 11147000
- Crimp dies: 11147100
- Locator: 11147200
- Removal tool: 11161000

If not otherwise specified, all values relating to the product are nominal values. Photographs are not to scale and are not true representations of the products in question.

# EPIC® MC 10

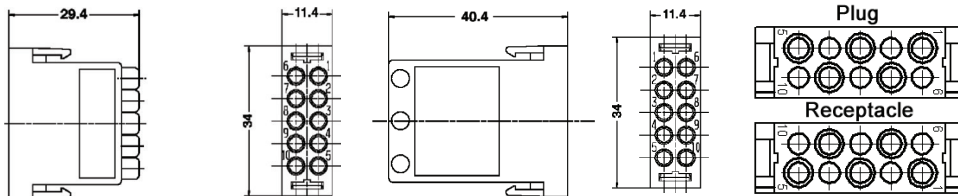
10-position module for signal transmission with stamped contacts



contacts sold separately, see below

Plug

Receptacle



all dimensions are in mm

### Technical data

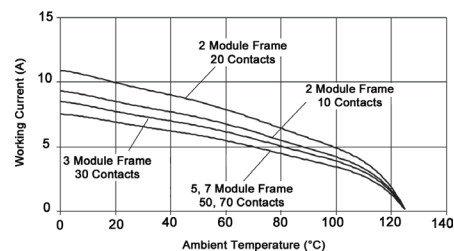
Temperature range:	-40°C to +100°C
Rated voltage:	250V
Rated current:	10A
Wire size:	26 - 14 AWG (0.14 - 2.5 mm <sup>2</sup> )

### Complete the installation

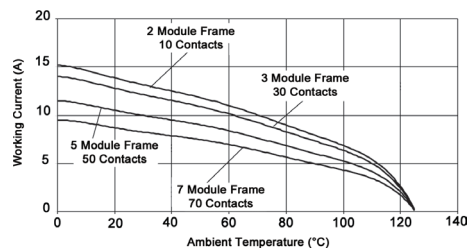
- MC frames page 371
- Module removal tool 11171200

### Derating curve

20 AWG (0.5 mm<sup>2</sup>)



16 AWG (1.5 mm<sup>2</sup>)



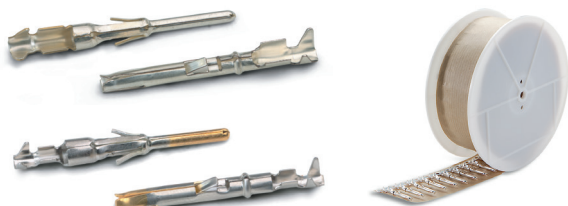
Termination	# of slots in frame	Plug	Receptacle	Contact size
crimp termination	1	10383400	10383500	1.6 mm

### Approvals



## 1.6 mm contacts

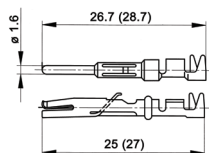
Stamped & formed contacts for EPIC® MC series modules



contacts sold in bags of 100 or 1 reel

### Contact tools

- Crimp tool: 11147000
- Locator: 11147300
- Removal tool: 11161000
- Crimp dies:  
 0.14 - 0.5 mm<sup>2</sup>: 11147170  
 0.5 - 1.5 mm<sup>2</sup>: 11147180  
 1.5 - 2.5 mm<sup>2</sup>: 11147190
- Crimp tool, die & locator:  
 0.14 - 0.5 mm<sup>2</sup>: 11147004  
 0.5 - 1.5 mm<sup>2</sup>: 11147005  
 1.5 - 2.5 mm<sup>2</sup>: 11147006



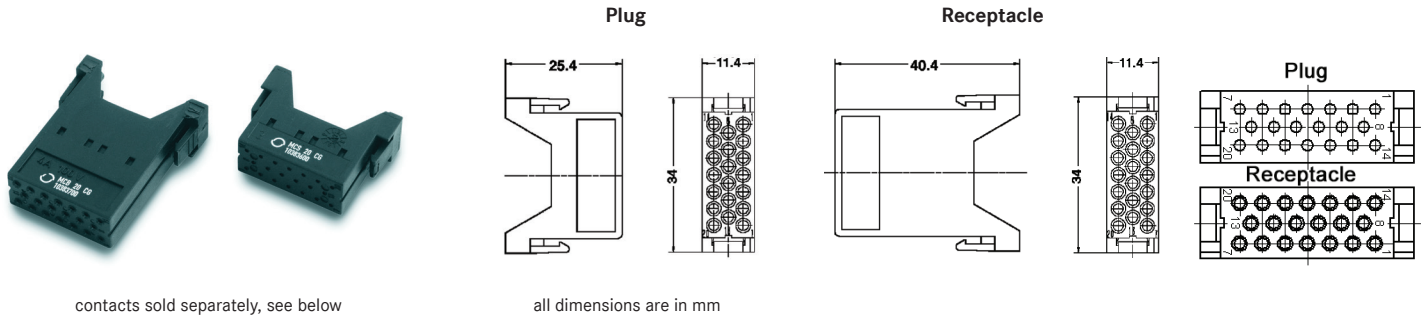
Contact size mm <sup>2</sup> AWG	Stripping length mm	Bag of 100 silver contacts		Bag of 100 gold contacts		Reel of 100 silver contacts: left-hand feed		Reel of 200 silver contacts: left-hand feed		
		pin	socket	pin	socket	pin	socket	pin	socket	
0.14 - 0.5	26 - 20	2.5 - 0.5	11241100	11231100	11243100	11233100	—	—	11240700	11230700
0.5 - 1.5	20 - 16	3.5 - 0.5	11221000	11236100	11221300	11238100	—	—	11220700	11235700
1.5 - 2.5	16 - 14	3.5 - 0.5	11223500	11228500	—	—	11223000	11228000	—	—

Contact size mm <sup>2</sup> AWG	Stripping length mm	Reel of 2000 silver contacts: right-hand feed		Reel of 2000 gold contacts: right-hand feed		Reel of 2000 silver contacts: left-hand feed		Reel of 2000 gold contacts: left-hand feed		
		pin	socket	pin	socket	pin	socket	pin	socket	
0.14 - 0.5	26 - 20	2.5 - 0.5	11240000	11230000	—	—	11240400	11230400	11240500	11230500
0.5 - 1.5	20 - 16	3.5 - 0.5	11220000	11235000	11220100	11235200	11226000	11226500	—	—
1.5 - 2.5	16 - 14	3.5 - 0.5	—	—	—	—	11222700	11227700	—	—

If not otherwise specified, all values relating to the product are nominal values. Photographs are not to scale and are not true representations of the products in question.

# EPIC® MC 20

## 20-position module for signal transmission



contacts sold separately, see below

all dimensions are in mm

Technical data	
Temperature range:	-40°C to +100°C
Rated voltage:	100V
Rated current:	4A
Wire size:	28 - 20 AWG (0.08 - 0.56 mm <sup>2</sup> )

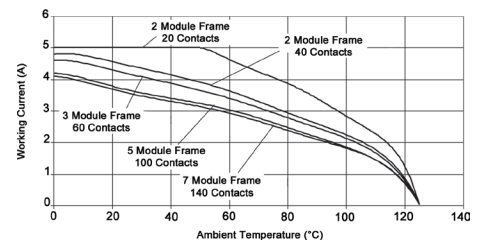
**Complete the installation**

- MC frames page 371
- Module removal tool 11171200

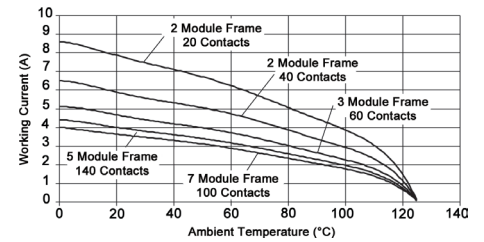
Termination	# of slots in frame	Plug	Receptacle	Contact size
crimp termination	1	10383600	10383700	1 mm

### Derating curve

#### 24 AWG (0.25 mm<sup>2</sup>)



#### 20 AWG (0.5 mm<sup>2</sup>)



**Approvals**

## 1 mm contacts

### Stamped & formed contacts for EPIC® MC series modules



Contact size		Stripping length mm	Reel of 500 gold contacts: left-hand feed	
mm <sup>2</sup>	AWG*		pin	socket
0.08-0.2	28-26	2.5 ± 0.5	44429013	44429009
0.2-0.52	26-20	2.5 ± 0.5	44429014	44429010

\* AWG conversion is approximate

**Complete the installation**

- Crimp tool: 11158400
- Removal tool: 11132500

### for thermocouple applications

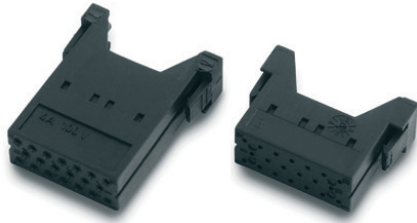


Contact size		Stripping length mm	Material	Polarity	Color	Type	Strip of 25 contacts	
mm <sup>2</sup>	AWG*						pin	socket
0.25-0.52	24-20	2.5 ± 0.5	chromel	(+)	white	type K	TC-CH-P	TC-CH-S
0.25-0.52	24-20	2.5 ± 0.5	alumel	(-)	green	type K	TC-AL-P	TC-AL-S
0.25-0.52	24-20	2.5 ± 0.5	iron	(+)	black	type J	TC-IR-P	TC-IR-S
0.25-0.52	24-20	2.5 ± 0.5	constantan	(-)	yellow	type J	TC-CO-P	TC-CO-S

\* AWG conversion is approximate

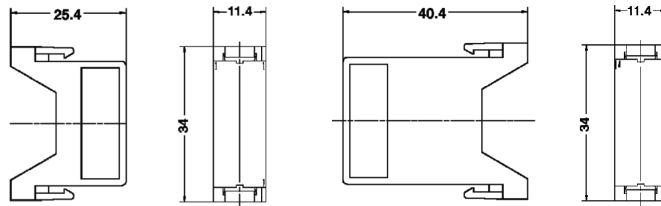
Alumel is a registered trademark of Concept Alloys, Inc.  
Photographs are not to scale and are not true representations of the products in question.  
If not otherwise specified, all values relating to the product are nominal values.

**EPIC® MC 0**  
Dummy module



Plug

Receptacle



all dimensions are in mm

Termination	# of slots in frame	Plug	Receptacle
no termination	1	10399400	10399500

Complete the installation

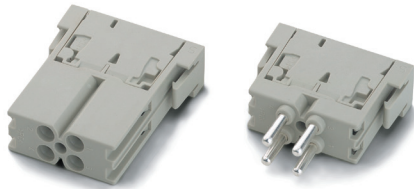


MC frames  
page 371



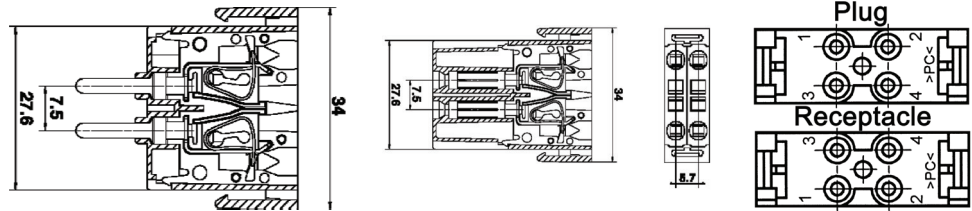
Module  
removal tool  
11171200

**EPIC® MC Cage Clamp**  
4-position clamp termination module



Plug

Receptacle



all dimensions are in mm

Technical data

Temperature range:	-40°C to +100°C
Rated voltage:	400V
Rated current:	14A
Wire size:	20 - 14 AWG (0.5 - 2.5 mm <sup>2</sup> )

Wire size		# of slots in frame	Plug	Receptacle
mm <sup>2</sup>	AWG			
0.5-2.5	20-14	1	10399600	10399700

Complete the installation

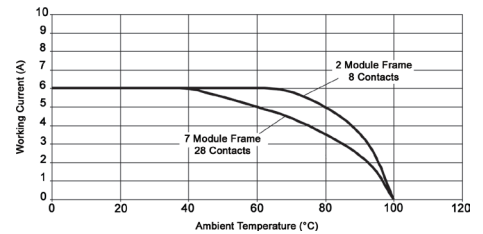


MC frames  
page 371



Module  
removal tool  
11171200

Derating curve  
20 AWG (0.5 mm<sup>2</sup>)



Approvals

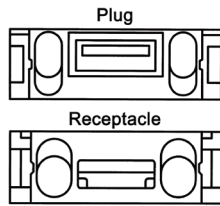
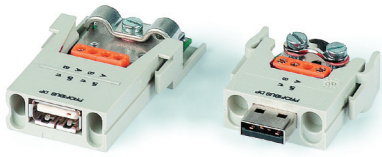


If not otherwise specified, all values relating to the product are nominal values. Photographs are not to scale and are not true representations of the products in question.



## EPIC® MC PROFIBUS® DP

2 contacts + shield



mount in high profile housings only

Termination	# of slots in frame	Plug	Receptacle
screw	1	10390400	10390500

### Technical data

Temperature range:	-20°C to +85°C
Rated voltage:	30V
Rated current:	1A
Transmission rate:	12 Mbit/s

### Complete the installation



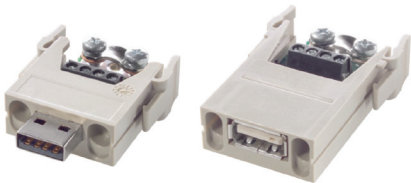
MC frames  
page 371

### Approvals



## EPIC® MC Universal Bus

4 contacts + shield



mount in high profile housings only

Termination	Wire size		# of slots in frame	Plug	Receptacle
	mm <sup>2</sup>	AWG			
screw	0.08 - 1.5	28 - 16	1	10390600	10390700

### Technical data

Temperature range:	-20°C to +85°C
Rated voltage:	30V
Rated current:	1A
Max. transfer rate:	1.5 MB/s (bus feed-through)

### Complete the installation



MC frames  
page 371

### Approvals



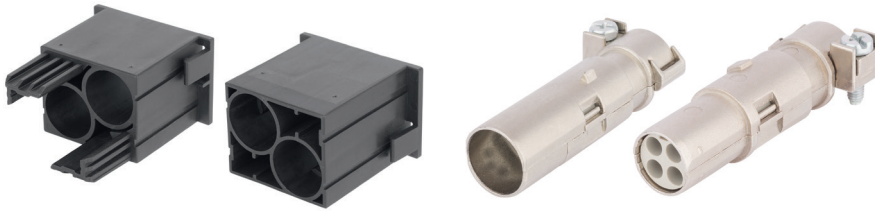
If not otherwise specified, all values relating to the product are nominal values.  
Photographs are not to scale and are not true representations of the products in question.

**EPIC® MC BUS**  
8 contacts + shield



module

contact holder



contacts sold separately, see below

Complete the installation



MC frames  
page 371

Approvals



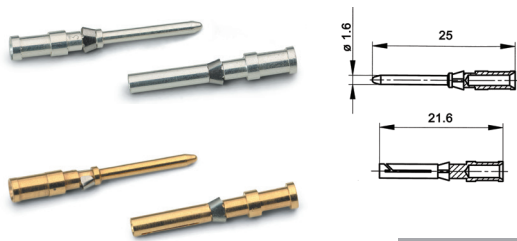
Technical data

Temperature range:	-40°C to +125°C	Wire size:	26 - 14 AWG (0.14 - 2.5 mm <sup>2</sup> )
Rated voltage:	50V	Cable clamping range:	3 - 9 mm
Rated current:	10A	Communication rate:	1 Gbit/s

Description	Number of contacts	# of slots in frame	Plug	Receptacle	Contact size
module only	—	2	10390410	10390411	1.6 mm
contact holder	4 + shield	—	10390412	10390413	1.6 mm

1.6 mm contacts

Machined contacts for EPIC® MC series modules



contacts sold in bags of 100

Contact size		Stripping length mm	# of marking tracks	Bag of 100 silver contacts		Bag of 100 gold contacts	
mm <sup>2</sup>	AWG			pin	socket	pin	socket
0.14-0.37	26-22	8	1	13162000	13163000	13162500	13163500
0.5	20	8	2	13162100	13163100	13162600	13163600
0.75-1.0	18	8	3	13162200	13163200	13162700	13163700
1.5	16	8	4	13162300	13163300	13162800	13163800
2.5	14	8	5	13162400	13163400	13162900	13163900

Contact tools



Crimp tool:  
11147000



Crimp dies:  
11147100



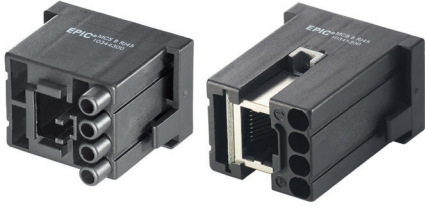
Locator:  
11147200



Removal tool:  
11161000

If not otherwise specified, all values relating to the product are nominal values. Photographs are not to scale and are not true representations of the products in question.

# EPIC® MC Ethernet RJ45 + 4 power contacts



contacts & RJ45 connector separately, see below

### Technical data

<b>Temperature range:</b>	-20°C to +85°C
<b>Rated voltage:</b>	600V (power contacts)
<b>Rated current:</b>	10A (power contacts)
<b>Wire size</b>	
- data contacts:	26 - 24 AWG (0.14 - 0.25 mm <sup>2</sup> )
- power contacts:	26 - 14 AWG (0.14 - 2.5 mm <sup>2</sup> )

Description	# of slots in frame	Plug	Receptacle	Contact size
module only	1	10344300	10345300	1.6 mm

### Complete the installation

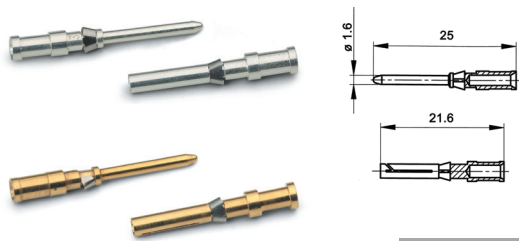
	MC frames page 371		CAT.5 RJ45 connector: CE6326
	Module removal tool 11171200		RJ45 crimp tool: CE5092

### Approvals



## 1.6 mm contacts

### Machined contacts for EPIC® series inserts



contacts sold in bags of 100

Contact size		Stripping length mm	# of marking tracks	Bag of 100 silver contacts		Bag of 100 gold contacts	
mm <sup>2</sup>	AWG			pin	socket	pin	socket
0.14 - 0.37	26 - 22	8	1	13162000	13163000	13162500	13163500
0.5	20	8	2	13162100	13163100	13162600	13163600
0.75 - 1.0	18	8	3	13162200	13163200	13162700	13163700
1.5	16	8	4	13162300	13163300	13162800	13163800
2.5	14	8	5	13162400	13163400	13162900	13163900

### Contact tools

	Crimp tool: 11147000		Crimp dies: 11147100		Locator: 11147200		Removal tool: 11161000
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If not otherwise specified, all values relating to the product are nominal values. Photographs are not to scale and are not true representations of the products in question.

# EPIC® MC Pneumatic

## Pneumatic modules for 1 or 2 hoses



These modules are used for easy and fast connection of compressed air hoses. Applications include machine building, mini pneumatics, measurement, and control technology.

### Application advantage

- For compressed air hoses with inner diameters of 2.5 mm or 4 mm and a maximum outer diameter of 8 mm.
- Typically used with 4 x 2.5 mm or 6 x 4 mm metric tubing.
- Receptacles include built-in valve.

### Technical data

<b>Number of ports:</b>	1, 2
<b>Max. air pressure:</b>	10 bar (145 psi)
<b>Temperature range:</b>	-20°C to +100°C
<b>Mechanical mating cycles:</b>	100

### Complete the installation



MC frames  
page 371



Module  
removal tool  
11171200

### Approvals

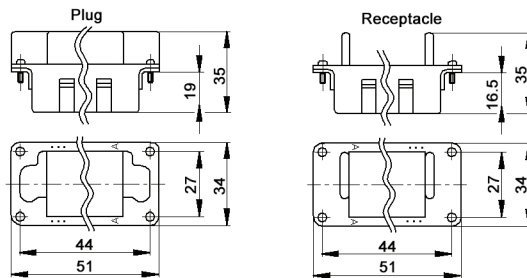


Hose inner diameter	# of slots in frame	1 port		2 ports	
		plug	receptacle	plug	receptacle
2.5 mm	1	44424004	44424005	44424008	44424009
4.0 mm	1	44424006	44424007	44424010	44424011

If not otherwise specified, all values relating to the product are nominal values. Photographs are not to scale and are not true representations of the products in question.

## EPIC® MC 2 module frame

### Modular frame with 2 positions



all dimensions are in mm

Positions	Plug	Receptacle
2	10381000	10381100
2+PE	10349000	10349100

#### Compatible housing



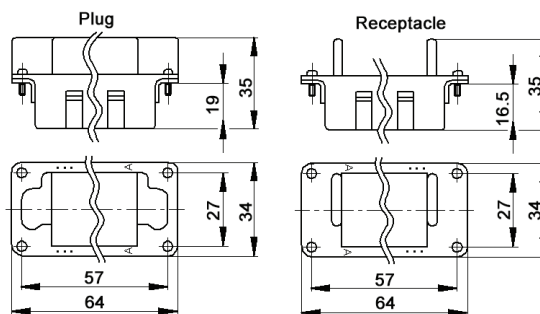
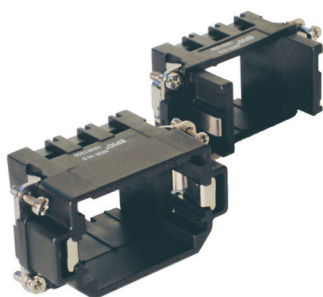
HB 6  
page 379

#### Approvals



## EPIC® MC 3 module frame

### Modular frame with 3 positions



all dimensions are in mm

Positions	Plug	Receptacle
3	10381200	10381300

#### Compatible housing



HB 10  
page 382

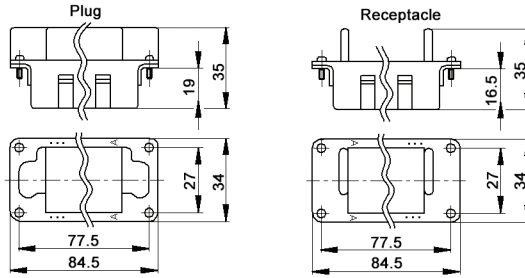
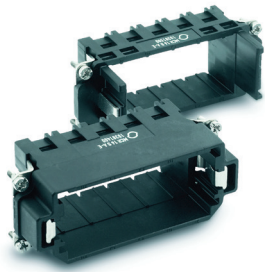
#### Approvals



If not otherwise specified, all values relating to the product are nominal values.  
Photographs are not to scale and are not true representations of the products in question.

## EPIC® MC 5 module frame

Modular frame with 5 positions



all dimensions are in mm

Positions	Plug	Receptacle
5	10381400	10381500

Compatible housing



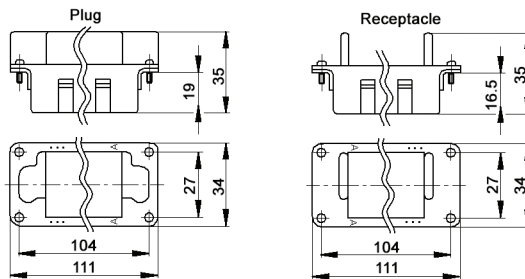
HB 16  
page 388

Approvals



## EPIC® MC 7 module frame

Modular frame with 7 positions



all dimensions are in mm

Positions	Plug	Receptacle
7	10381600	10381700

Compatible housing



HB 24  
page 394

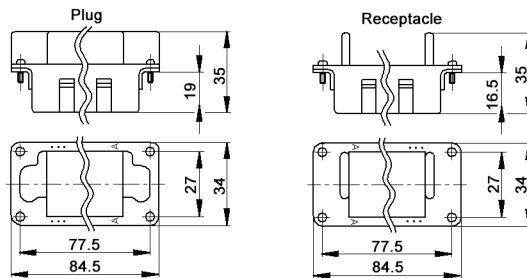
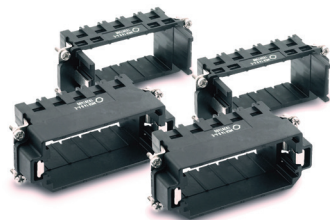
Approvals



If not otherwise specified, all values relating to the product are nominal values. Photographs are not to scale and are not true representations of the products in question.

## EPIC® MC 10 module frame

### Modular frames with 10 positions




all dimensions are in mm

Positions	Plug	Receptacle
5 x2	10381400 (x2)	10381500 (x2)

x2 MC 5 frames, order two frames

**Compatible housing**



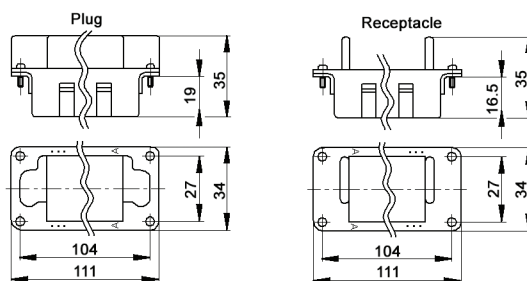
HB 32  
page 400

**Approvals**



## EPIC® MC 14 module frame

### Modular frames with 14 positions




all dimensions are in mm

Positions	Plug	Receptacle
7 x2	10381600 (x2)	10381700 (x2)

x2 MC 7 frames, order two frames

**Compatible housing**



HB 48  
page 402

**Approvals**



If not otherwise specified, all values relating to the product are nominal values.  
Photographs are not to scale and are not true representations of the products in question.