

Pulse counters, electromechanical

Standard counters	6 or 8 digits with/without reset (AC+DC)	B 16 / B 18
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The standard totalizers **B 16** (with manual reset) and **B 16, B 18** (without reset) offer a robust construction.

They are ideal for use in harsh industrial environments as individual counters or as plug-in types in combination with additional **B, BVa, HB** or **HVa** counters.

Characteristics

- B 16.x1: 6-digit totalizer with manual reset.
- B 16.x0 and B 18.x0: 6- and 8-digit totalizers without reset.
- Counters without front bezel fit into bezels F1B and F2B and can be combined in RM 50 x 25 mm with socket 945.2.
- Very long service life (200 million pulses).

Benefits

- Can be combined with preset counters BVa and HVa, as well as with timer HB.
- Can be upgraded using various front covers to protect against dust, dirt and humidity – reset can be locked out.

Applications

General quantity counting, piece counting, event counting, timing.

Type series

Description	6 digits without reset	8 digits without reset	6 digits with reset	Order information
Counter without front bezel, rear mounting, plugs into socket box 945.2 and frontbezel F1	–	B 18.00	B 16.01	- Art. no. - For special voltages, please give type, voltage, kind of voltage and series e.g.: B 16.31, 4.5 V DC, 0 or B 18.00, 48 V AC, a
Panel mount, front bezel size no. 1 with 2 mounting holes	B 16.10	B 18.10	B 16.11	
Panel mount, for clip mounting	B 16.20	B 18.20	B 16.21	
Panel mount, front bezel size no. 3 with 2 mounting holes	B 16.30	B 18.30	B 16.31	

Accessories	Dimensions in mm [inch]	Order no.
Front bezel, type F1B plastic	for cut-out 54 x 49 [2.13 x 1.93], for screw mounting, for plug-in counters B1x.0x and HB2x.0x in socket box type 945.2	beige black G007501 G007502
Socket box, type 945.2	for counters B1x.0x and HB2x.0x, can be used for plug-in connections in front bezel F1B	black G008434
Sealing cover, type K1, IP65	for front bezel 60 x 50 [2.36 x 1.97], with screw mounting, for electromechanical counters and via adapter front bezel N003001 for counters 48 x 24 [1.89 x 0.94]	transparent / grey transparent / black G008300 G008301
Transparent cover, lockable, IP65	for cut-out 54 x 29 [2.13 x 1.14], for screw mounting to front bezel F1B or adapter front bezel N003001, for counters with cut-out 50 x 25 [1.97 x 0.98] or 45 x 22.2 [1.77 x 0.87]	N003002
Blind enclosure, 53 x 28 [2.07 x 1.10]	for cut-out 50 x 25 [1.97 x 0.98], for counters 53 x 28 [2.09 x 1.10]	black T005753
Mounting frame with cut-out 50 x 25 [2.36 x 1.97] via separate adapter also for 45 x 22.2 [1.77 x 0.87]	for snap-on mounting on 35 [1.38] top-hat DIN rail, for counters 53 x 28 [2.09 x 1.10] and via separate adapter (T008180) for counters 48 x 24 [1.89 x 0.94]	chromated G300004
Mounting rail frame SR	for B and HB counters for snap-on mounting on 35 [1.38] top-hat DIN rail	SR 1 for 1x3 B counters SR 2 for 2x3 B counters G300000 G300001
Transparent cover, replacement part, IP65	screw-on, IP65 with gaskets and screws suitable for Dv(s)B1x and Dv(s)HB2x	type Dv, lockable type Dvs, key lockable G008121 G008131

Suitable gaskets, other accessories and installation examples for optional accessories can be found in chapter accessories or in the accessories section under: www.kuebler.com/accessories.

Pulse counters, electromechanical

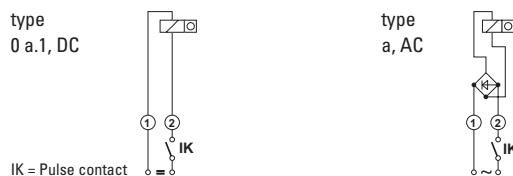
Standard counters	6 or 8 digits with/without reset (AC+DC)	B 16 / B 18
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Technical data		
Electrical connection	count mechanism	pin \varnothing 1.6 mm [0.063] with push on connector for flying leads 0.5 ... 1.0 mm ²
	socket box	flat pin 0.8 x 2.8 mm [0.032 x 0.11"]
Rated voltage	type 0 / 1 / a	12 / 24 / 48 / 115 / 230 V DC \pm 10 % 24 / 48 / 115 / 230 V AC \pm 10 %
Color of counter		grey
Height of figures	B 16	2 x 4.5 mm [0.079 x 0.18]
	B 18	2 x 4 mm [0.079 x 0.16]
Color of figures		white on black
Count mechanism shaft		stainless steel
Mounting position		any
Operating life		approx. 200 x 10 ⁶ pulses
Protection	with reset	IP40 (front side)
	without reset	IP41 (front side)
Weight	without reset	81 g [2.86 oz]
	with reset	83 g [2.93oz]
	socket box	14 g [0.49 oz]
Test voltage		2000 V ~ effective, acc. to VDE 0435
EMC standards		EN 55011 class B EN 61000-6-2, EN 61000-6-3
Device safety	designed to protection class	EN 61010 part 1 2
	application area	pollution level 2

Options	
Color of housing black	Art. no. ref. to type 1.XXX.XX1.XXX
Electr. connection at counter	flat pins 0.8 x 2.8 mm [0.032 x 0.11"] with push on connectors Art. no. 1.XX7.XXX.XXX
Counter with flat pin 6.3 x 0.8 mm [0.25 x 0.032"]	on request 1.XXX.XXX.XXX.011
Screw terminal	Art. no. 1.XXX.XXX.XXX.023
Connection with flying leads	on request 1.XX3.XXX.XXX
Extended temperature range	on request
Key locking reset	grey 1.XXX.XX6.XXX
	black 1.XXX.XX7.XXX
	key for reset G050265 (replacement part)

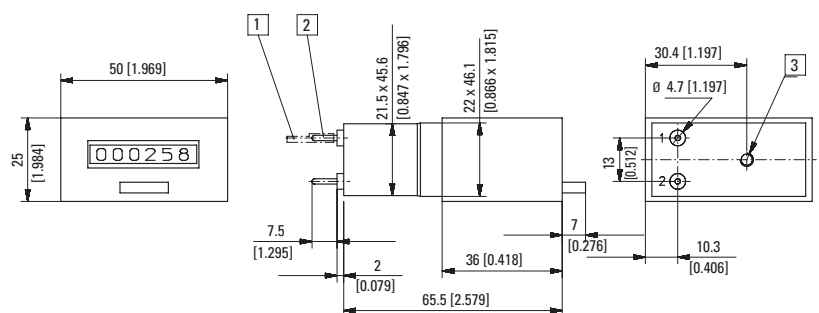


Connection diagram



Type / Counting mechanism										
Voltage	Type	Pulse frequency max.	Pulse on time min.	Pulse interval min.	Pulse ratio	On-time	Power consump. approx.	Permi. residual ripple max.	Operating temp. (non-condensing)	
V DC	0	10 Hz	60 ms	40 ms	3 : 2	100 %	1 W	48 %	-10°C ... +60°C [+14°F ... +140°F]	
V DC	1	25 Hz	24 ms	16 ms	3 : 2	100 %	2 W	48 %	-10°C ... +60°C [+14°F ... +140°F]	
V AC	a	18 Hz	22.2 ms	33.3 ms	2 : 3	100 %	2.9 VA	—	-10°C ... +55°C [+14°F ... +131°F]	

Without front bezel, rear mounting 6 digits, with reset Type B 16.01



1 Push on connector \varnothing 1.5 [0.059], tinned 2 Round pin \varnothing 1.6 [0.063], tinned 3 M4, 5 [0.20] deep
Color of housing: beige (standard) – black, Art. no. 1.230.XX1.XXX

Type	Voltage	Display	Art. no.			
			12 V	24 V	115 V	230 V
B 16.01	DC (10 Hz) / 0	6 digits,	1.230.012.012	1.230.012.013		
	DC (25 Hz) / 1	with reset	1.230.012.032	1.230.012.033		
	AC (18 Hz) / a			1.230.012.061	1.230.012.064	1.230.012.066

Dimensions in mm [inch]

Pulse counters, electromechanical

Standard counters

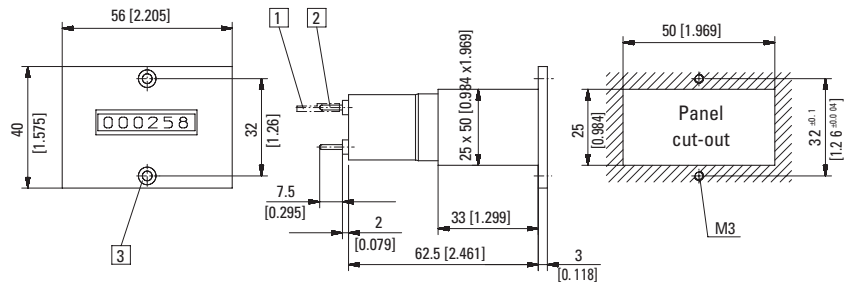
6 or 8 digits with/without reset (AC+DC)

B 16 / B 18

Panel mount with front bezel size no. 1 and 2 mounting holes

6 digits, without reset

Type B 16.10



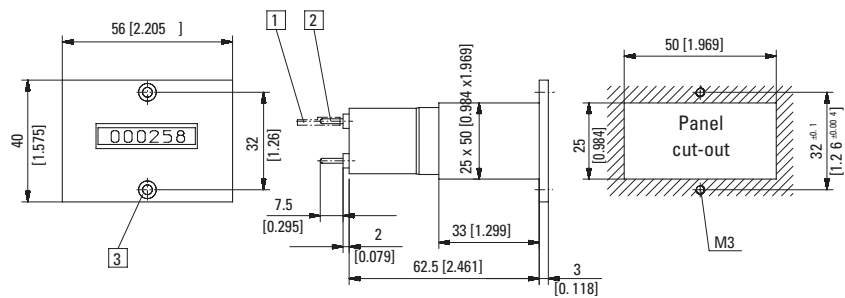
1 Push on connector \varnothing 1.5 [0.059], tinned 2 Round pin \varnothing 1.6 [0.063], tinned 3 Countersinking Af3 DIN 74
Color of housing: grey (standard) – black, Art. no. 1.230.101.XXX

Type	Voltage	Display	Art. no.			
			12 V	24 V	115 V	230 V
B 16.10	DC (10 Hz) / 0	6 digits, without reset	1.230.100.012	1.230.100.013		
	DC (25 Hz) / 1		1.230.100.032	1.230.100.033		
	AC (18 Hz) / a			1.230.100.061	1.230.100.064	1.230.100.066

Panel mount front bezel size no. 1 with 2 mounting holes

6 digits, with reset

Type B 16.11



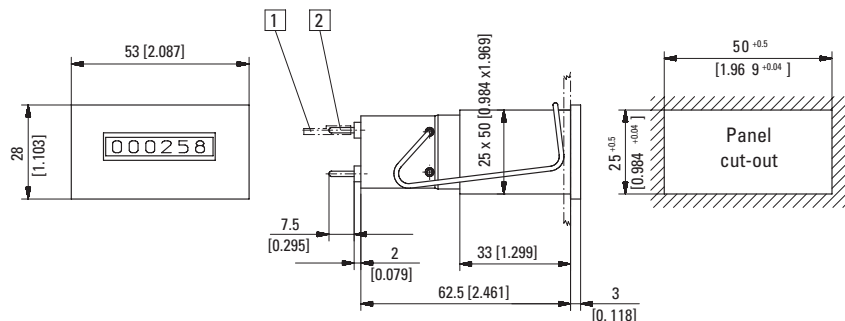
1 Push on connector \varnothing 1.5 [0.059], tinned 2 Round pin \varnothing 1.6 [0.063], tinned 3 Countersinking Af3 DIN 74
Color of housing: grey (standard) – black, Art. no. 1.230.111.XXX

Type	Voltage	Display	Art. no.			
			12 V	24 V	115 V	230 V
B 16.11	DC (10 Hz) / 0	6 digits, with reset	1.230.110.012	1.230.110.013		
	DC (25 Hz) / 1		1.230.110.032	1.230.110.033 ¹⁾		
	AC (18 Hz) / a			1.230.110.061 ¹⁾	1.230.110.064	1.230.110.066 ¹⁾

Panel mount for clip mounting

6 digits, without reset

Type B 16.20



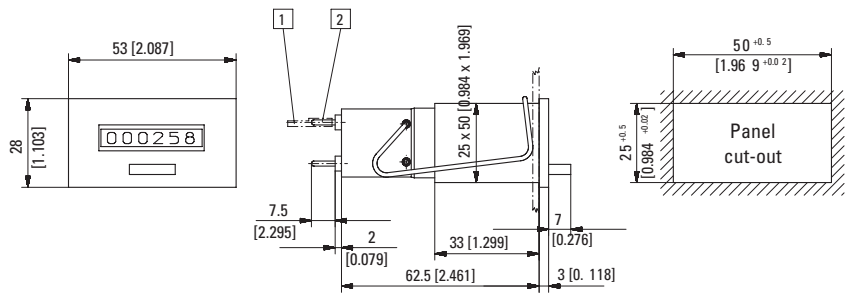
1 Push on connector \varnothing 1.5 [0.059], tinned 2 Round pin \varnothing 1.6 [0.063], tinned
Color of housing: grey (standard) – black, Art. no. 1.230.201.XXX

Type	Voltage	Display	Art. no.				Further stock types:
			12 V	24 V	115 V	230 V	
B 16.20	DC (10 Hz) / 0	6 digits, without reset	1.230.200.012	1.230.200.013			1.237.201.066 230 V AC/a with flat pins
	DC (25 Hz) / 1		1.230.200.032	1.230.200.033 ¹⁾			
	AC (18 Hz) / a			1.230.200.061	1.230.200.064	1.230.200.066	

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Standard counters **6 or 8 digits with/without reset (AC+DC)** **B 16 / B 18**

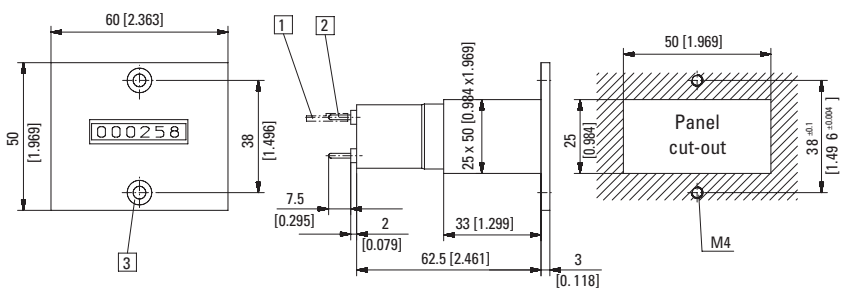
Panel mount for clip mounting
6 digits, with reset
Type B 16.21



1) Push on connector \varnothing 1.5 [0.059], tinned 2) Round pin \varnothing 1.6 [0.063], tinned
Color of housing: grey (standard) – black, Art. no. 1.230.211.XXX

Type	Voltage	Display	Art. no.				Further stock types: (flat pins)
			12 V	24 V	115 V	230 V	
B 16.21	DC (10 Hz) / 0	6 digits, with reset	1.230.210.012	1.230.210.013 ¹⁾	1.230.210.064	1.230.210.066 ¹⁾	1.230.211.033 24 V DC/1 sw 1.230.217.013 24 V DC/0 sw vs 1.237.211.066 230 V AC/a sw
	DC (25 Hz) / 1		1.230.210.032	1.230.210.033 ¹⁾			
	AC (18 Hz) / a			1.230.210.061			

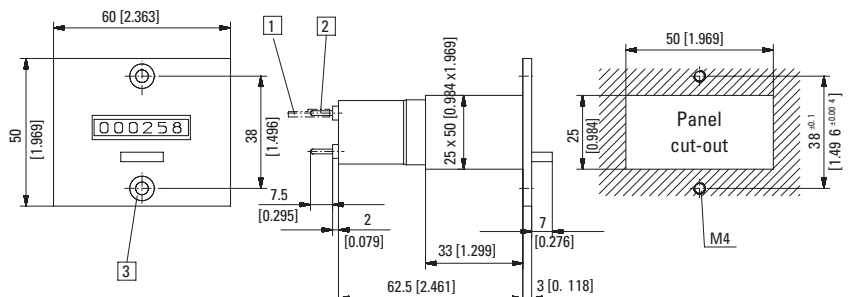
Panel mount with front bezel size no. 3 and 2 mounting holes
6 digits, without reset
Type B 16.30



1) Push on connector \varnothing 1.5 [0.059], tinned 2) Round pin \varnothing 1.6 [0.063], tinned 3) Countersinking Am 4 DIN 74
Color of housing: grey (standard) – black, Art. no. 1.230.301.XXX

Type	Voltage	Display	Art. no.			
			12 V	24 V	115 V	230 V
B 16.30	DC (10 Hz) / 0	6 digits, without reset	1.230.300.012	1.230.300.013	1.230.300.064	1.230.300.066
	DC (25 Hz) / 1		1.230.300.032	1.230.300.033		
	AC (18 Hz) / a		1.230.300.061			

Panel mount with front bezel size no. 3 and 2 mounting holes
6 digits, with reset
Type B 16.31



1) Push on connector \varnothing 1.5 [0.059], tinned 2) Round pin \varnothing 1.6 [0.063], tinned 3) Countersinking Bf 4 DIN 74
Color of housing: grey (standard) – black, Art. no. 1.230.111.XXX

Type	Voltage	Display	Art. no.			
			12 V	24 V	115 V	230 V
B 16.31	DC (10 Hz) / 0	6 digits, with reset	1.230.310.012	1.230.310.013	1.230.310.064	1.230.310.066
	DC (25 Hz) / 1		1.230.310.032	1.230.310.033		
	AC (18 Hz) / a		1.230.310.061			

Dimensions in mm [inch]

1) Stock types.

Pulse counters

Pulse counters, electromechanical

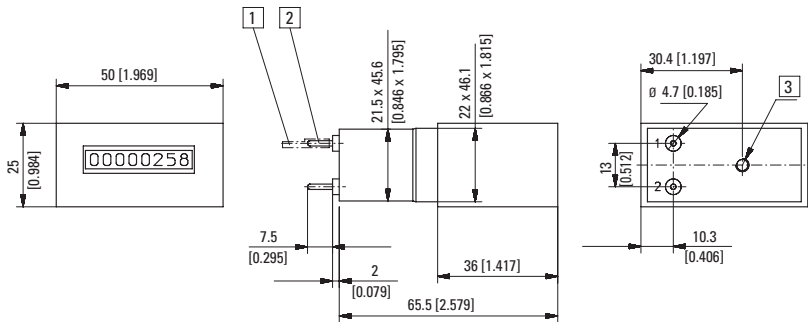
Standard counters

6 or 8 digits with/without reset (AC+DC)

B 16 / B 18

Without front bezel, rear mounting
8 digits, without reset

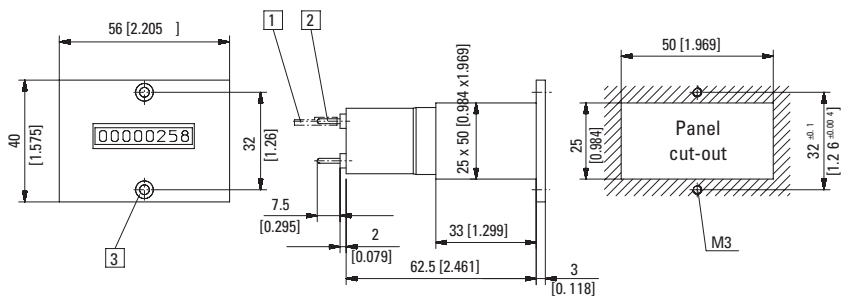
Type B 18.00



1 Push on connector \varnothing 1.5 [0.059], tinned 2 Round pin \varnothing 1.6 [0.063], tinned 3 M4, 5 [0.20] deep
Color of housing: beige (standard) – black, Art. no. 1.260.XX1.XXX

Type	Voltage	Display	Art. no.			
			12 V	24 V	115 V	230 V
B 18.00	DC (10 Hz) / 0	8 digits, without reset	1.260.002.012	1.260.002.013		
	DC (25 Hz) / 1		1.260.002.032	1.260.002.033 ¹⁾		
	AC (18 Hz) / a			1.260.002.061	1.260.002.064	1.260.002.066

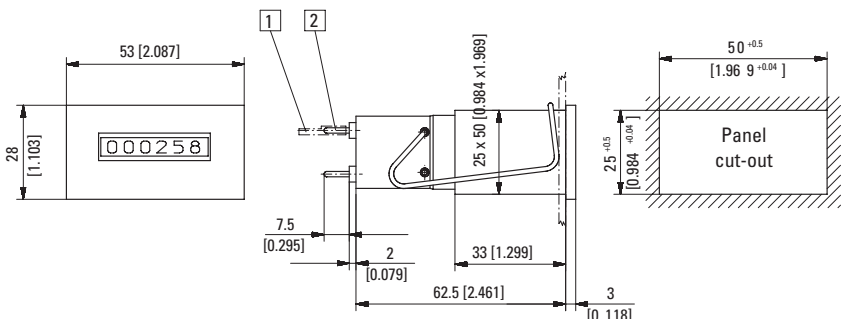
Panel mount with front bezel size no. 1 and 2 mounting holes
8 digits, without reset
Type B 18.10



1 Push on connector \varnothing 1.5 [0.059], tinned 2 Round pin \varnothing 1.6 [0.063], tinned 3 Countersinking Af3 DIN 74
Color of housing: grey (standard) – black, Art. no. 1.260.101.XXX

Type	Voltage	Display	Art. no.			
			12 V	24 V	115 V	230 V
B 18.10	DC (10 Hz) / 0	8 digits, without reset	1.260.100.012	1.260.100.013 ¹⁾		
	DC (25 Hz) / 1		1.260.100.032	1.260.100.033		
	AC (18 Hz) / a			1.260.100.061	1.260.100.064	1.260.100.066

Panel mount for clip mounting
8 digits, without reset
Type B 18.20



1 Push on connector \varnothing 1.5 [0.059], tinned 2 Round pin \varnothing 1.6 [0.063], tinned
Color of housing: grey (standard) – black, Art. no. 1.260.201.XXX

Type	Voltage	Display	Art. no.				Further stock types:
			12 V	24 V	115 V	230 V	
B 18.20	DC (10 Hz) / 0	8 digits, without reset	1.260.200.012	1.260.200.013 ¹⁾			1.260.201.013
	DC (25 Hz) / 1		1.260.200.032	1.260.200.033 ¹⁾			
	AC (18 Hz) / a			1.260.200.061	1.260.200.064	1.260.200.066 ¹⁾	

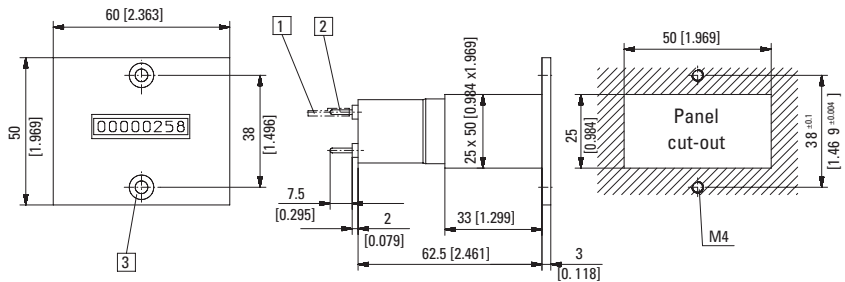
Dimensions in mm [inch]

1) Stock types.

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Standard counters **6 or 8 digits with/without reset (AC+DC)** **B 16 / B 18**

**Panel mount with front bezel size no. 3
and 2 mounting holes**
8 digits, without reset
Type B 18.30



1 Push on connector \varnothing 1.5 [0.059], tinned 2 Round pin \varnothing 1.6 [0.063], tinned 3 Countersinking Am 4 DIN 74
Color of housing: grey (standard) – black, Art. no. 1.260.301.XXX

Type	Voltage	Display	Art. no.			
			12 V	24 V	115 V	230 V
B 18.30	DC (10 Hz) / 0	8 digits, without reset	1.260.300.012	1.260.300.013		
	DC (25 Hz) / 1		1.260.300.032	1.260.300.033		
	AC (18 Hz) / a			1.260.300.061	1.260.300.064	1.260.300.066

Mounting examples for optional accessories

