



## The Clock as an Effective Eye-Catcher in City and Building Architecture

Advertising clocks, large-size clocks and facade clocks are more than mere public displays of time. They attract the attention of many people, bring cityscapes to life, grace facades and enrich the atmosphere of various buildings as artistic objects of design. This explains the

desire for customized clock designs. By combining various housing designs, dials and hands with the latest clock technology, such as time over Ethernet and LED illumination, we have the experience and know how to help you realize your most ambitious projects.

Mounting	Model	Fig.	Movement	Attachment/ wall bushing Ø in mm	Dials	Ø 25	Ø 30	Ø 40	Ø 50	Ø 60	Ø 80	Ø 100	Ø 120	Ø 140	Ø 150	Ø 170	Ø 180	Ø 200	Ø 220	Ø 230	Ø 250	Ø 280	Ø 300	Ø 350	Ø 400	Ø 450	Ø 500			
Indoor	A509b	1	NU 90t	Z Ø 12	ZB 1	✓	✓	✓	✓	✓																				
	ZB 17				✓	✓	✓																							
	F509b	IBU 190t S	ZB 1		✓	✓	✓	✓	✓																					
	ZB 17		✓		✓	✓																								
DMU140 <sup>1)</sup>	1	DMU140	Z Ø 20	ZB 1						✓	✓	✓	✓																	
Indoor or outdoor	A540	2	A 40	FW	ZB 1			✓	✓	✓																				
	A543	3	A 43	RW Ø 20	ZB 1			✓	✓	✓																				
	A545	4	A 45	RW Ø 22/50	ZB 1			✓	✓	✓																				
	A550	2	A 50	FW	ZB 1						✓	✓	✓	✓																
					ZB 45					✓	✓	✓	✓																	
					ZB 46					✓	✓	✓	✓																	
	A553	3	A 53	RW Ø 35	ZB 1						✓	✓	✓	✓																
					ZB 45					✓	✓	✓	✓																	
					ZB 46					✓	✓	✓	✓																	
	A555	4	A 55	RW Ø 42/70	ZB 1						✓	✓	✓																	
					ZB 45					✓	✓	✓																		
					ZB 46					✓	✓	✓																		
	A610 F610	4	MW 10 MWS 10	RW Ø 52/80	ZB 1							✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓ <sup>2)</sup>	✓ <sup>2)</sup>	✓ <sup>2)</sup>					
					ZB 45						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓ <sup>3)</sup>	✓ <sup>2)</sup>	✓ <sup>2)</sup>				
					ZB 46						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓ <sup>2)</sup>	✓ <sup>2)</sup>	✓ <sup>2)</sup>				
	A611 F611	3 <sub>a</sub>	MW 10 MWS 10	with front mounting plate	ZB 50							✓	✓	✓	✓	✓	✓	✓	✓	✓	✓									
	A620	4	MW 20	RW Ø 65/120	ZB 1																			✓	✓	✓	✓			
	F620	4	MWS 20	RW Ø 65/120	ZB 1																	✓	✓	✓	✓	✓	✓	✓		
	A624a	4	MW 24	RW Ø 65/120	ZB 60										✓	✓	✓	✓			✓	✓	✓							
	A624b	4	MW 24	RW Ø 65/120	ZB 60																			✓	✓	✓	✓			
DMU350	4	DMU350	RW Ø 65/120	ZB 1										✓		✓	✓	✓		✓	✓	✓	✓							

Larger diameters upon request

<sup>1)</sup> cover glass required for exterior mounting, <sup>2)</sup> for MW 10 only

We can offer customized solutions for any specific projects. Please don't hesitate to contact us!

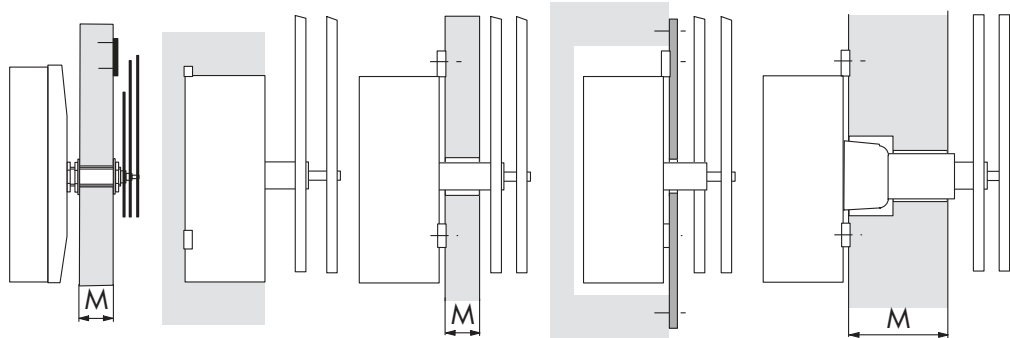
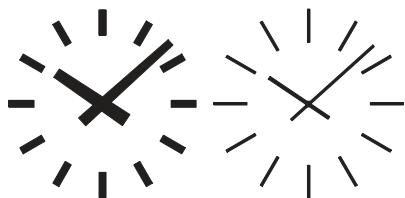


Fig. 1 Z Central mounting  
 Fig. 2 FW Front sided wall mounting  
 Fig. 3 RW Rear sided wall mounting  
 Fig. 3a Front mounting plate to MW 10, MWS 10, DMU 350 Art. Nr. 23345  
 Fig. 4 RW Rear sided wall surface mounting

Movement	Wall thickness M max. (mm)
NU 90t	24
IBU 190t S	28
A 43	40
A 45	300
A 50	-
A 53	40
A 55	450
MW 10	600
MW 20	800
MW 24	800
A 40	14.5
DMU140	28
DMU350	600

## Available Dials



### ZB 1 / ZB 17

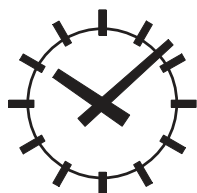
12 individual block-shaped hour markers to mount on a wall, 1 pair of block-shaped hands.

ZB 1: bold design, ZB 17: slim design



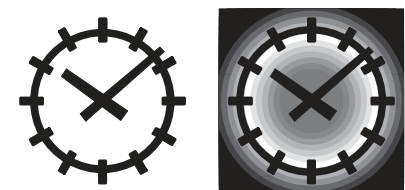
### ZB 45

12 hour markers mounted on 2 rings, with bolts for mounting on a wall, 1 pair of block-shaped hands.



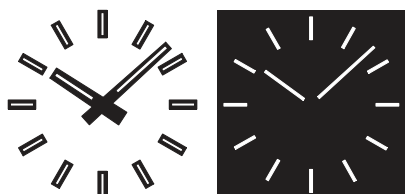
### ZB 46

12 hour markers mounted on 1 ring, with bolts for mounting on a wall, 1 pair of block-shaped hands.



### ZB 50

The 12 hour markers are mounted on a U-section ring which contains a high-voltage neon tube facing the wall on its inside. The skeleton dial and hands appear as silhouette at night. For the best effect at night, the background should be kept in a light color.



### ZB 60

The 12 individual hour markings and hands are in box design. On the front, the slits are covered with white acrylic glass. High-voltage neon tubes or LEDs with white, yellow, or red colors are integrated into the hour markers and hands (LED in white only).



### ZB R

12 Roman numerals made of light metal to mount on a wall, 1 pair of sword-shaped hands.

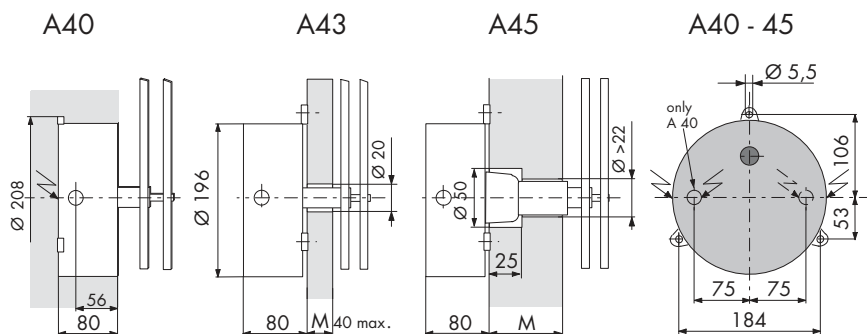
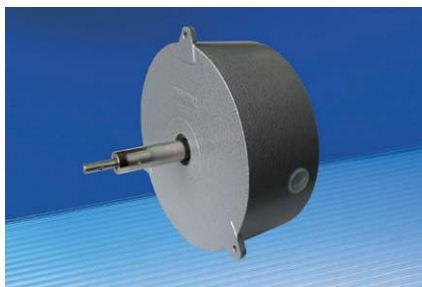
Available for the whole range of facade clocks upon request.

## Impulse movements for facade clocks (wall clocks) in indoor applications

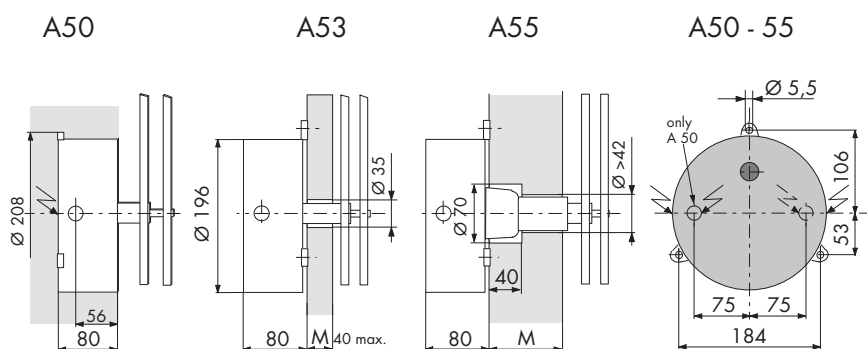
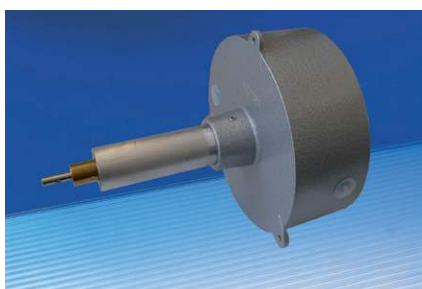
Technical data	NU 90t (Art. no. 251530)	IBU 190t S (Art. no. 202837)
Dial diameter	Up to 80 cm	
Synchronization	polarized minute pulses	
Impulse voltage	12, 24, 48 or 60 VDC (selectable with DIP switch)	24V / 36V / 48V / 60V (selectable with DIP switch)
Impulse current	12 mA @ 12 VDC, 6 mA @ 24 - 60 VDC	6 mA
Power supply	none	45 V - 265 VAC or 48 VDC, < 2VA (max. 30 mA)
Temperature range	-30 to +70 °C	
Hand dimensions	According to DIN 41092/3	
Weight	180 g	380 g

## A series - Impulse movements for small facade clocks

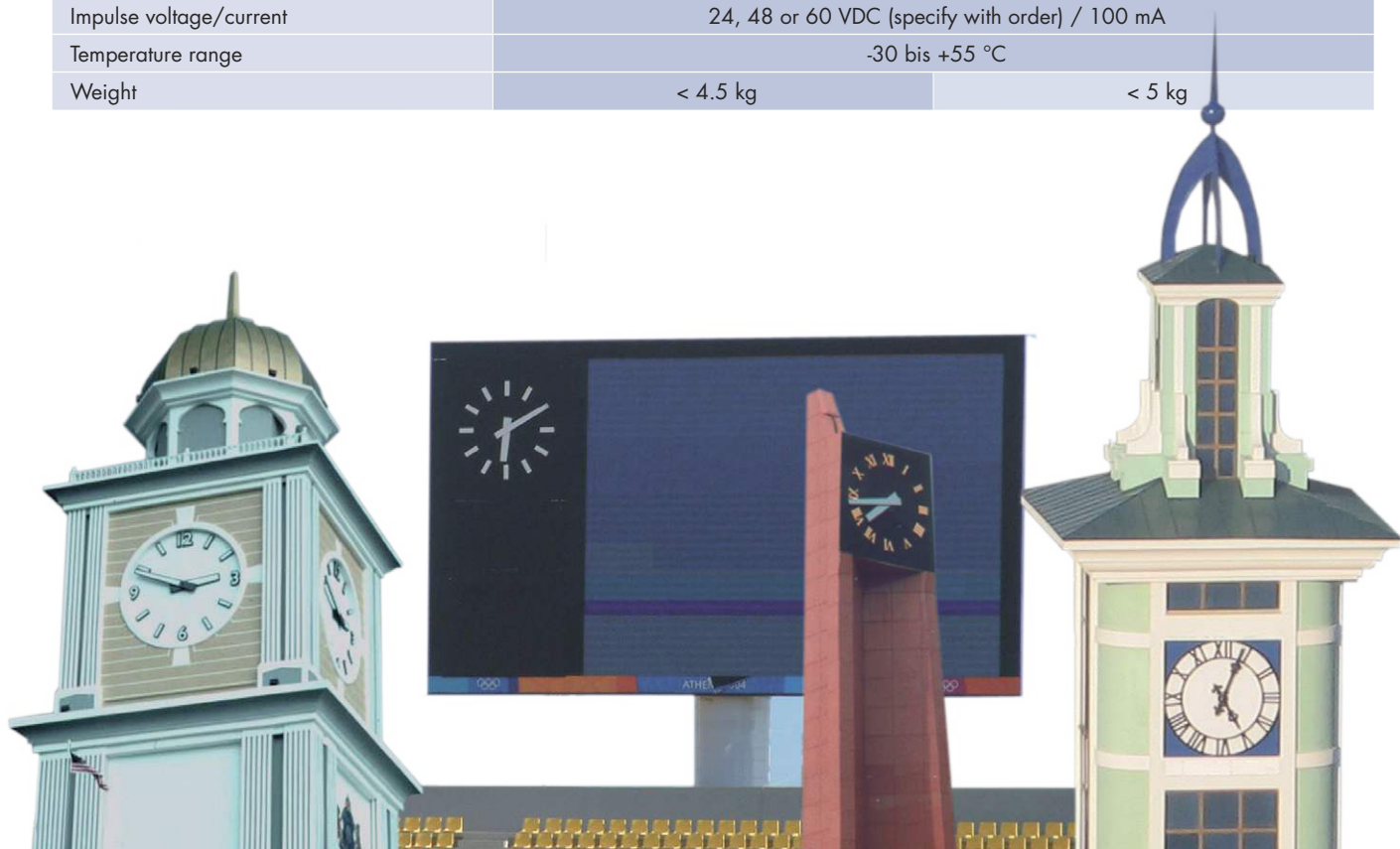
### A 40 series



### A 50 series

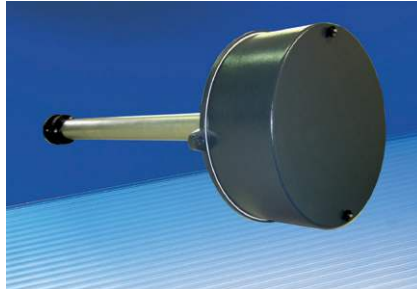
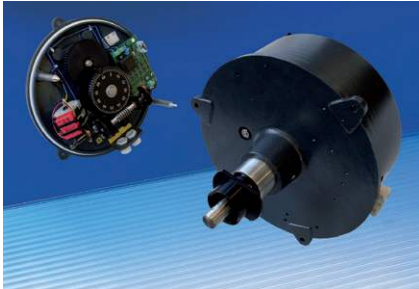


Technical data	A 40 series	A 50 series
Dial diameter	up to 60 cm	80 to 150 cm (A 55 max. 120 cm)
Synchronization	polarized minute pulses	
Impulse voltage/current	24, 48 or 60 VDC (specify with order) / 100 mA	
Temperature range	-30 bis +55 °C	
Weight	< 4.5 kg	< 5 kg

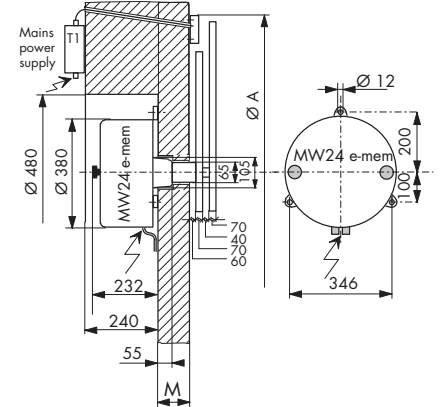
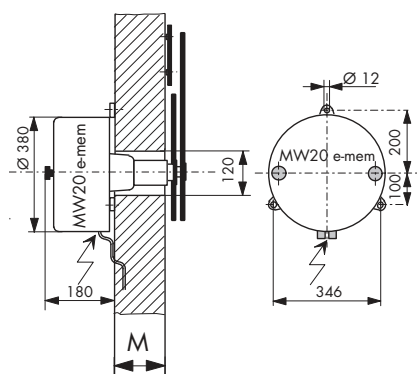
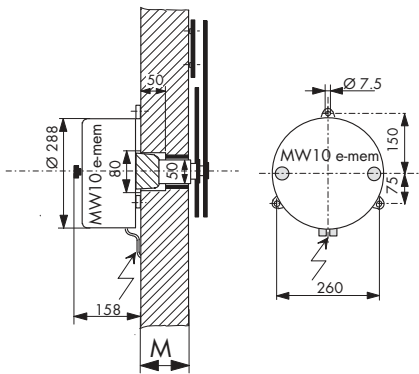


## MW series - impulse movements for big facade clocks

### MW 10 / MWS 10 MW 20



### MW 24 / MWS 20



Technical data	MW 10	MWS 10	MW 20	MWS 20	MW 24
Design	h/min	h/min/s	h/min	h/min/s	h/min
Dial diameter	1 - 3,5 m	1 - 2,5 m	3,5 - 5 m	2,5 - 5 m	1,5 - 5 m
Synchronization	polarized minute pulses				
Impulse voltage/current	12 - 60 VDC / max. 4 mA				
Power supply	230 VAC / 50 Hz, < 10 VA				
Temperature range	-30 to +55 °C				
Weight	< 9 kg	< 11 kg	< 22 kg	< 26 kg	< 24 kg
Illuminated hands	-	-	-	-	✓
Impulse storage	electronic impulse storage (e-mem)				



## DMU series - self-setting movements

### DMU140

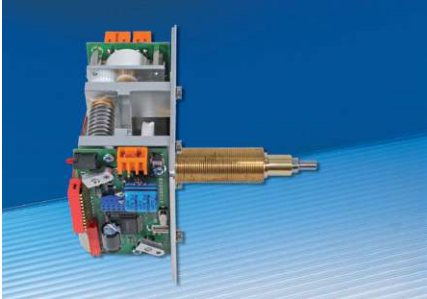
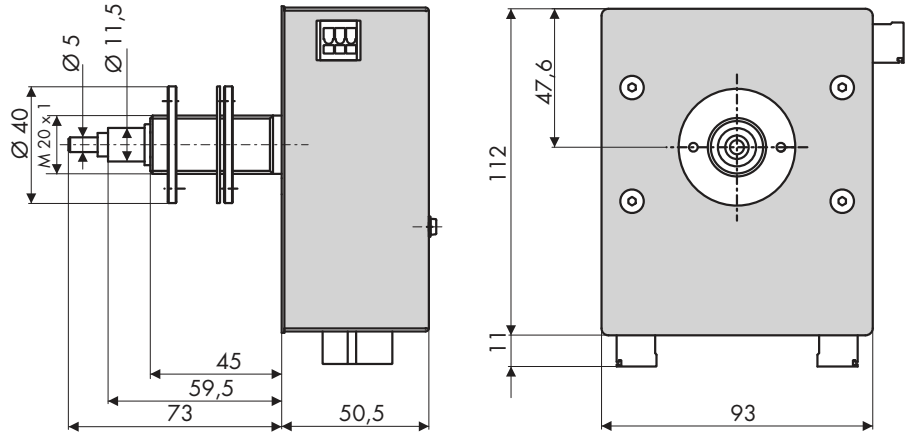


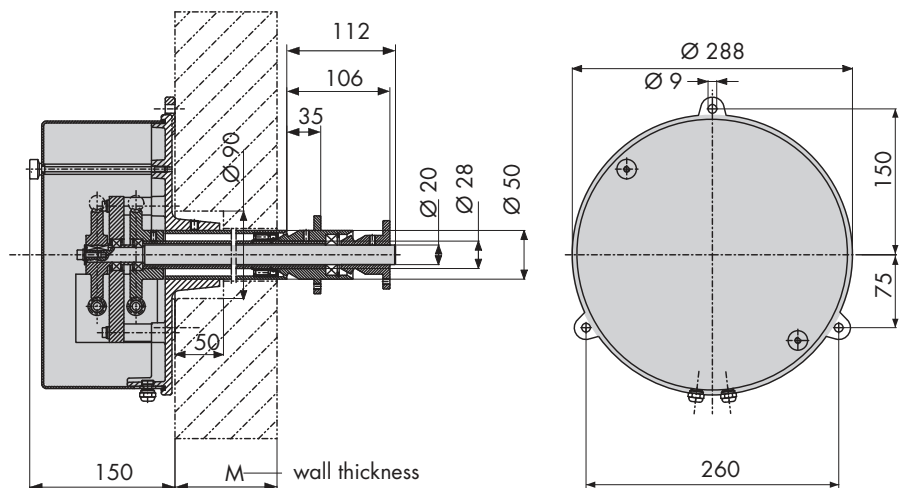
Illustration with removed dust protection hood



### DMU350



Illustration with removed dust protection hood



Technical Data	DMU 140 (Art. No.: 201828)	DMU 350 (Art. No.: 202 460)
Dial diameter	up to 140 cm	up to 350 cm
Synchronization	<ul style="list-style-type: none"> <li>- GPS (GPS 4500, UTC, active current loop)</li> <li>- DCF 77 / MSF (active current loop)</li> <li>- MOBALine (local time)</li> <li>- RS 485 monitored or with IF 482 serial telegrams</li> </ul>	
Power supply	10 - 30 VDC or through MOBALine, < 1.5 VA (< 60 mA @ 24 VDC)	90 - 265 VAC 50/60 Hz, < 25VA
Temperature range	-30 to +70 °C	-30 to +55 °C
Relative humidity	0 - 95 %, non condensing	
Weight	680 g	< 9 kg

### Order specifications:

Clock type - Dial type - Dial  $\varnothing$  - Color - Wall thickness M - Illumination neon / LED - optionally pulse voltage

### Ordering examples:

A555 - ZB 46 -  $\varnothing$  120 cm - black hands and hour markers - M = 350 mm - pulse voltage 24V

DMU 350 - ZB 1 -  $\varnothing$  300 cm - black hands and hour markers - M = 500 mm

A624 - ZB 60 -  $\varnothing$  380 cm - black illuminated hands and hour markers - M = 450 mm - LED - pulse voltage 24V