

various buildings as artistic objects of design. This explains the desire for customized clock designs. By combining various housing

Mounting	Model		Movement	Attachment/ wall bushing Ø in mm	ıls	25	30	40	50	09	80	100	120	140	150	170	Ø 180	Ø 200	Ø 220	Ø 230	Ø 250	Ø 280	Ø 300	Ø 350	Ø 400	Ø 450	Ø 500
×	W	Fig.	¥	A × Ø	Dials	Ø	Ø	Ø	Ø	ğ	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø
	A509b		NU 90t		ZB 1	~	•	•	•	~																	
	, 10 0 7 0	1		ZØ 12	ZB 17	~	~	~																			
	F509b		IBU 190t S		ZB 1	~	~	~	~	~																	
Indoor					ZB 17	~	~	~																			
=	DMU 140 <sup>(1)</sup>		DMU 140	Z Ø 20	ZB 1						<b>/</b>	<b>/</b>	~	~													
			A 40	FW	ZB 1			~	~	~																	
	A543	3	A 43	RW Ø 20	ZB 1			~	~	~																	
	A545	4	A 45	RW Ø 22/50	ZB 1			~	~	~																	
					ZB 1						~	~	~		~												
	A550	2	A 50	FW	ZB 45						~	~	~		~												
					ZB 46						/	/	~		~												
					ZB 1						V	~	<b>/</b>		/												
	A553	3	A 53	RW Ø 35	ZB 45						<b>V</b>	•	<b>V</b>		<b>/</b>												
					ZB 46						<b>V</b>	•	<b>V</b>		~												
	A 5 5 5	,		DVA / CV / A O / 7 O	ZB 1						V	•	V														
	A555	4	A 55	RW Ø 42/70	ZB 45						•	-	•														
					ZB 46						-	-	•									4/2	4(2	4/2			
	A610	,	MW 10	DVA / Ø FO / OO	ZB 1							,	,	,	,	,	,	~	,	-	~	<b>1</b> (2	•	•			
	F610	4	MWS 10	RW Ø 52/80	ZB 45																V	<b>V</b> (2					
	A611		MW 10	with front mount-	ZB 46							•	•	•	•	•	•	•	•	•		<b>/</b> (2	V (2	V (2			
	F611	3а	MWS 10	ing plate								-	-	-	-	-	~	~	~	~	~						
ō	A620	4	MW 20	RW Ø 65/120																				~	~	~	~
Indoor or outdoor	F620	4	MWS 20	RW Ø 65/120																	~	~	~	~	~	~	~
o o	A624a	4	MW 24	RW Ø 65/120	ZB 60										~	~	•	~		~	~	~	~				
90	A624b	4	MW 24	RW Ø 65/120	ZB 60																			~	~	~	~
20	DMU 350	4	DMU 350	RW Ø 65/120	ZB 1										~		~	~	~		~	~	1	~			

11 cover glass required for exterior mounting, 12 for MW 10 only

We can offer customized solutions for any specific project. Please do not hesitate to contact us.

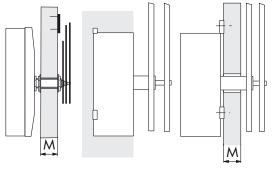


Fig. 1 Z Central mounting

Fig. 2 FW Front sided wall mounting



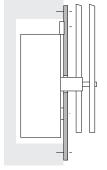


Fig. 3a Front mounting plate to MW 10, MWS 10, DMU 350 Art. Nr. 23345

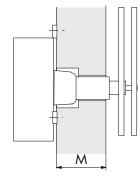


Fig. 4 RWV Rear sided wall surface mounting

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
DMU 140	28
DMU 350	600



## **Available Dials**



### ZB 1 / ZB 17

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



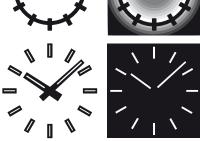
### **ZB 46**

12 hour markers mounted on 1 ring, with bolts for mounting on 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 in white, yellow or red 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.

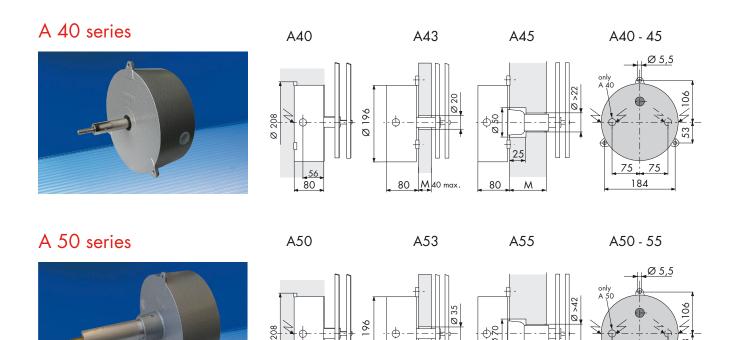
Available for the whole range of facade clocks upon request.

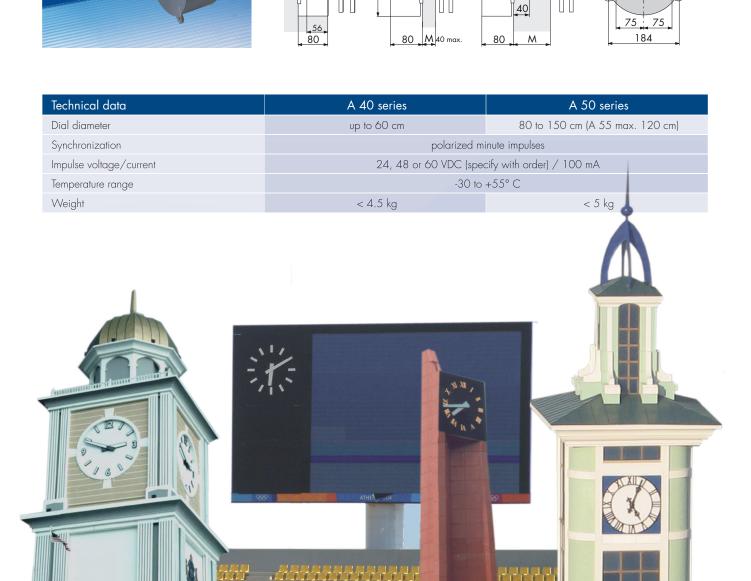
## Impulse movements for facade clocks (wall clocks) in indoor applications

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 1	DIN 41092/3						
Weight	180 g	380 g						



# A series - Impulse movements for small facade clocks





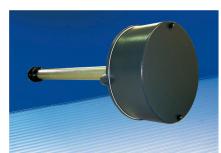


# MW series - impulse movements for big facade clocks

## MW 10 / MWS 10

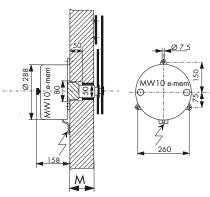


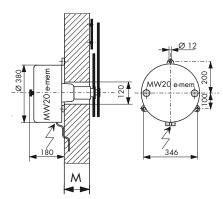
MW 20

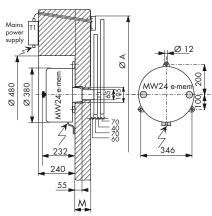


MW 24 / MWS 20









- 1 11										
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)									



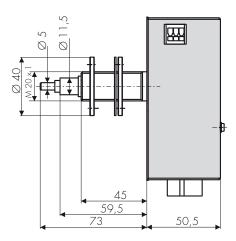


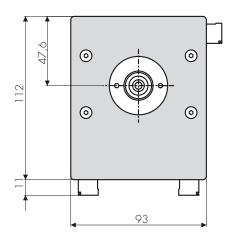
## DMU series - self-setting movements

### DMU 140 (indoor)



Illustration with removed dust protection hood

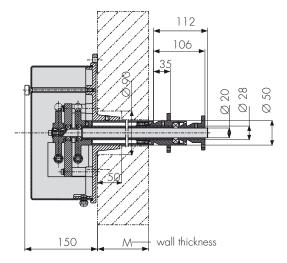


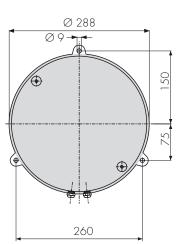


## DMU 350 (outdoor)



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	- GPS (GPS 4500, UTC, active current loop) - DCF 77 / MSF (active current loop) - MOBALine (local time) - RS 485 monitored or with IF 482 serial telegrams						
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 %, nc	on 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 24 V

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 24 V