



Facade movement

DMU 160

For the modern facade clock!

Your advantages:

The DMU 160 is a self-setting movement. Therefore, you never need to manually set the facade clock again.

Easy mounting and installation. Just connect the clock to MOBALine and it runs to line time.

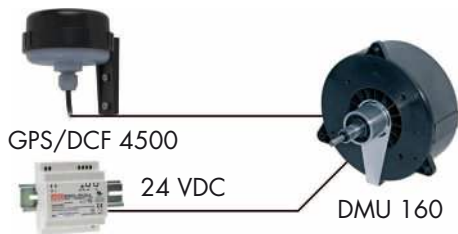
Available for front mounting or rear-sided wall mounting.

If the shafts of your old movement are too short for an upcoming facade insulation, the DMU 160 is the right solution.

If the DMU 160 is used as a replacement unit for an A50 series movement, the expenses are minimal. Simply extend the shaft hole to \varnothing 50mm.



DMU 160 - Applications



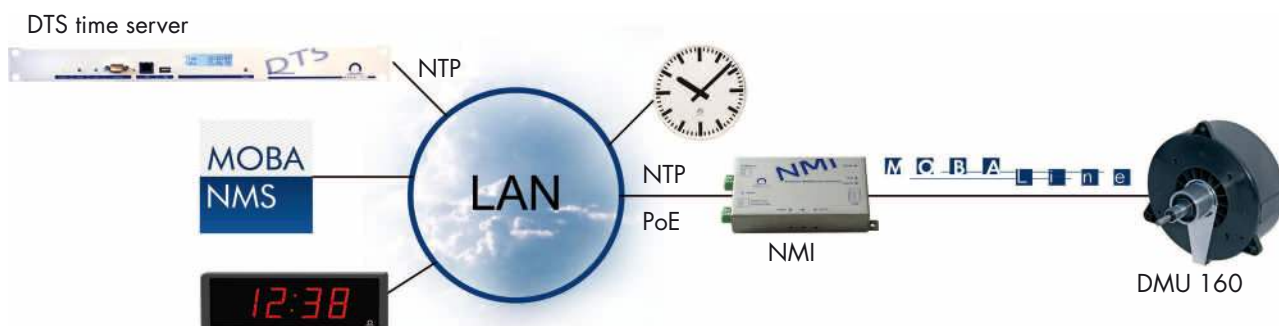
Stand-alone operation:

- Synchronization: DCF 77 or GPS (DCF)
Time zone selectable
- Power supply: 24 VDC (optional mains power supply 110 - 240 VAC to 24 VDC)
- Applications: Buildings with impulse master clock without DCF output, e.g. schools, sports facilities, historical buildings etc.



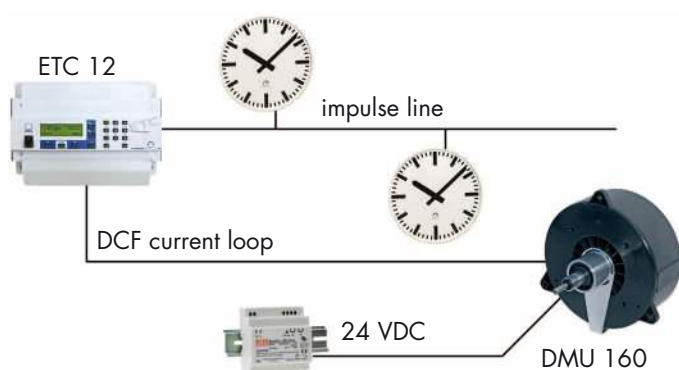
Slave clock operation

- Synchronization: MOBALine
- Power supply: MOBALine (alternatively 24 VDC, if MOBALine doesn't provide enough power)
- Applications: Buildings with an existing MOBALine master clock, e.g. schools, sports facilities, railway stations, public buildings etc.



LAN/Ethernet network operation:

- Synchronization: via NMI from LAN (from an NTP server), movement monitored via NMI
- Power supply: MOBALine (alternatively 24 VDC, if MOBALine doesn't provide enough power)
- Applications: Buildings with an existing time server, e.g. schools, sports facilities, railway stations, public buildings etc.



Mixed operation:

- Synchronization: DCF current loop, e.g. from impulse master clock ETC 12
- Power supply: 24 VDC (optional mains power supply 110 - 240 VAC to 24 VDC)
- Applications: Buildings with existing impulse master clock with DCF output (ETC 12/12R), e.g. schools

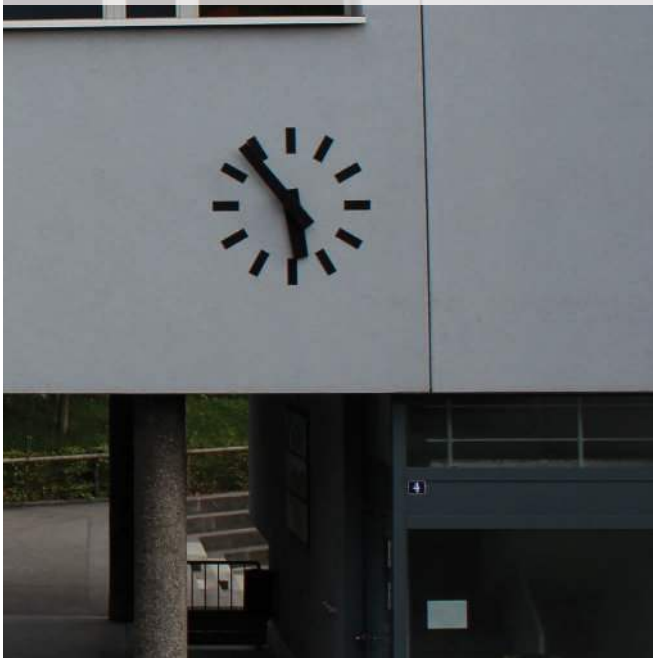
DMU 160 - Special features

Fast set-up time (less than 3 minutes)

Fast installation, no long waiting period until the clock displays the correct time. This reduces costs.

Fast daylight saving time change (less than 10 seconds)

The daylight saving time change is practically unnoticeable.



Operation mode of the minute hand selectable via DIP switch (on movement connection board)

You decide whether the minute hand moves continuously or in step mode.



"Stand alone" operation with DCF or GPS receiver possible

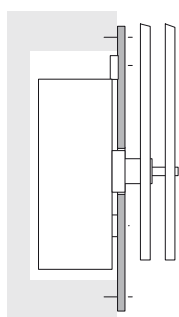
If you do not yet have a time system available or the existing one doesn't fit, use a DCF 77 or GPS satellite receiver, and your facade clock will always display the correct time. In this operating mode, the time zone is set directly on the clock.

Self-setting movement

No cumbersome setting of the hands thanks to the self-setting technology. Simply connect MOBALine or DCF and the clock autonomously runs to the set local time. This saves time and money.



DMU 160 - Technical details



Option:
Front installation
plate

Fig. 1: Front installation

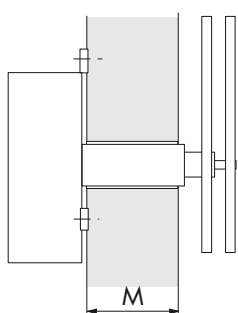
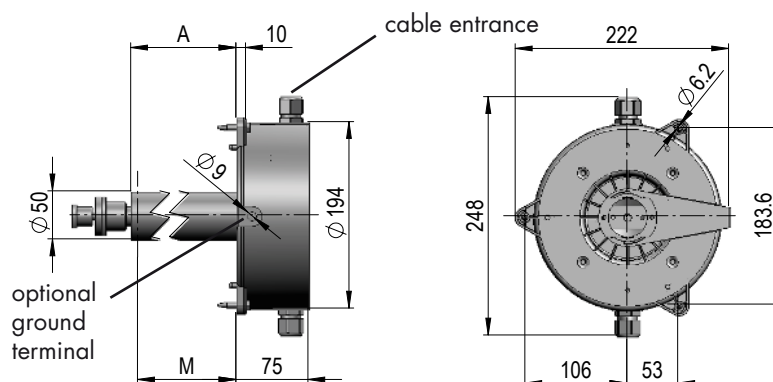


Fig. 2: Rear-sided
wall mounting

For the rear-sided wall mounting, the shafts are available in a user-defined length (variable 50 - 500mm). When ordering, we simply need to know the wall thickness M.



Type	Version	Wall thickness M (mm)	Shaft length A (mm)	Fig.	Art. no.
DMU 160F	Front installation	-	5	1	206 295
DMU 160S	Rear-sided wall mounting	35	40	2	206 308
DMU 160M		345	350	2	206 161
DMU 160V xxx		variable 50 - 500	M+5	2	206 302

Technical data	
Dial diameter	max. 1600 mm
Synchronization	- MOBALine (local time) (ETC, DTS, NMI...) - DCF (current loop, local time, UTC + time zone) (GPS/DCF 4500)
Time zone setting	Selectable by push-button, displayed via hand positions
Power supply	24 VDC ± 20% or MOBALine
Consumption	DC supply: < 100 mA @ 24 VDC MOBALine: via NMI (1 movement) via ETC, DTS: < 200 mA
Operation mode minute hand	minute, ½ minute or continuous (10 sec.) Setting: DIP switches or via MOBALine
Operation mode hour hand	continuous
Adjustment time	Synchronization: DCF/GPS approx. 10 min., MOBALine approx. 10 sec. Setting time: <3 min. Daylight saving time change: <10 sec.
Temperature range	-30 ... +70 °C
Weight	DMU 160F: approx. 1,6 kg; DMU 160V 500: approx. 4 kg
Max. wall thickness	500 mm
Diameter hour shaft	20 mm
Diameter minute shaft	8 mm
Torque minute shaft	>500 mNm
Torque hour shaft	>500 mNm
Accessories	- front mounting plate Ø 600 mm (art. no. 206 460) - flush-mounting box for front mounting (Art.-Nr. 702 622) (dimensions: 390x280x120mm)