

# Data Sheet

M Series  
100.D.101.05

## Wall Brackets, empty Synchronizing Wall Brackets

**WA 96**  
**WA 144**



**WEIGEL**

## Application

The wall brackets **WA 96/144** are being supplied either empty or equipped as synchronizing wall bracket.

The wall brackets can hold three each panel meters of the standard square form 96 mm x 96 mm resp. 144 mm x 144 mm with a mounting depth up to 150 mm resp. 190 mm.

### Synchronizing Wall Brackets

Voltage, frequency and phase balance have to coincide when connecting an alternator to the supply system or to a second alternator, when they are to be operated in parallel.

Four types of indicating meters are available for synchronizing application: (see data sheet No.)

– Synchronoscope	SY 96/144 S	(080.D.101.##) or
– Null Voltmeter	WQ 96/144 /0S	(022.D.101.##)
– Dual Voltmeter	WQ 96/144 /2S	(023.D.101.##) and
– Dual Frequency Meter	FQ 96/144 /2	(031.D.101.##)

Three each indicating meters can be combined to a synchronizing group in a wall bracket WA 96/144:

Synchronoscope	or	Null Voltmeter
Dual Voltmeter		Dual Voltmeter
Dual Frequency Meter		Dual Frequency Meter

## Mechanical Data

form A	wall bracket upright, bottom support
form B	wall bracket suspended, support on top
form C	wall bracket upright, support on top and bottom (WA 144 only)
form D	bench-type bracket, support on bottom

All bracket forms have a swivel range of 180°.

material	pressed steel
case	AL–die casting
support	
colour	gray (similar to RAL 7037)
fixing	by 4 each screws $\varnothing$ 10 mm
dimensions	see dimensional drawings
weight approx.	WA 96–A/B/D 4.5 kg
(wall bracket empty)	WA 144–A/B/D 6.5 kg
	WA 144–C 7.5 kg

### Synchronizing Wall Brackets

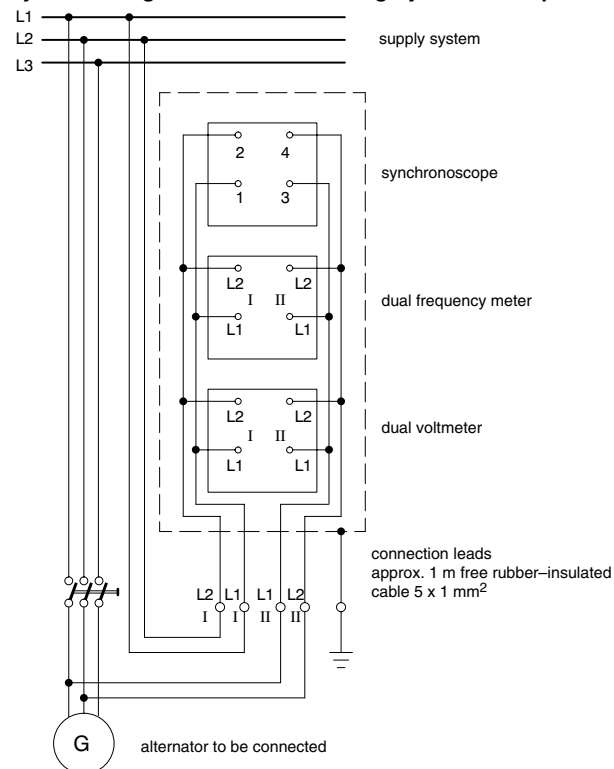
weight approx.	WA 96–A/B/D 7 kg	WA 144–A/B/D 10 kg	WA 144–C 11 kg
connection	rubber–insulated cable approx. 1 m, 5 x 1 mm <sup>2</sup>		
enclosure code	IP 52		
additional data	refer to data sheets relating to sole instruments		

## Rules and Standards

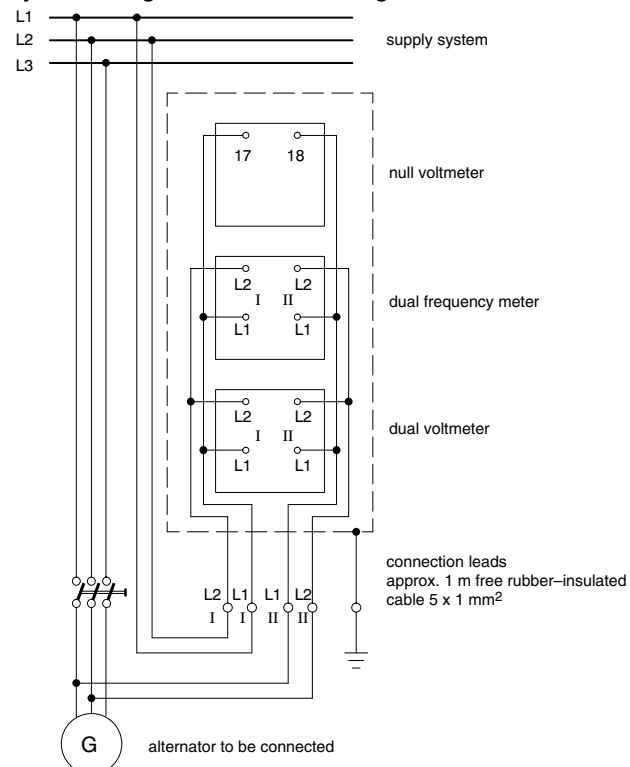
DIN EN 60 529	Enclosure codes by housings (IP-code)
DIN EN 61 010-1	Safety requirements for electrical measuring, control and laboratory equipment Part 1: General requirements
DIN IEC 61 554	Panel mounted equipment – Electrical measuring instruments – Dimensions for panel mounting

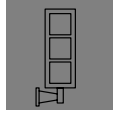
## Connections

### Synchronizing Wall Bracket including Synchronoscope



### Synchronizing Wall Bracket including Null Voltmeter





# Data Sheet

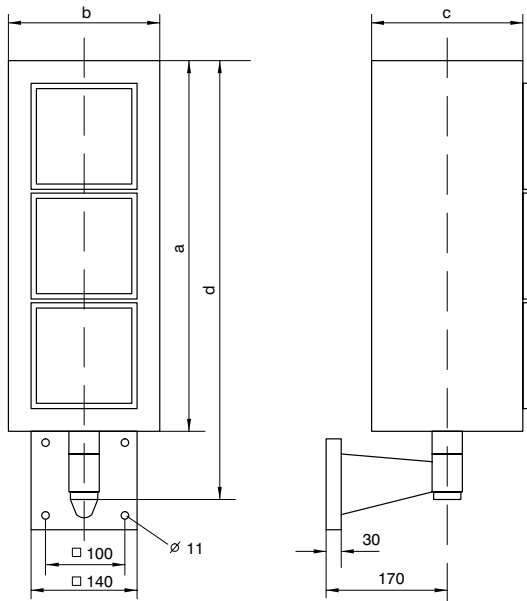
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## Wall Brackets, empty Synchronizing Wall Brackets

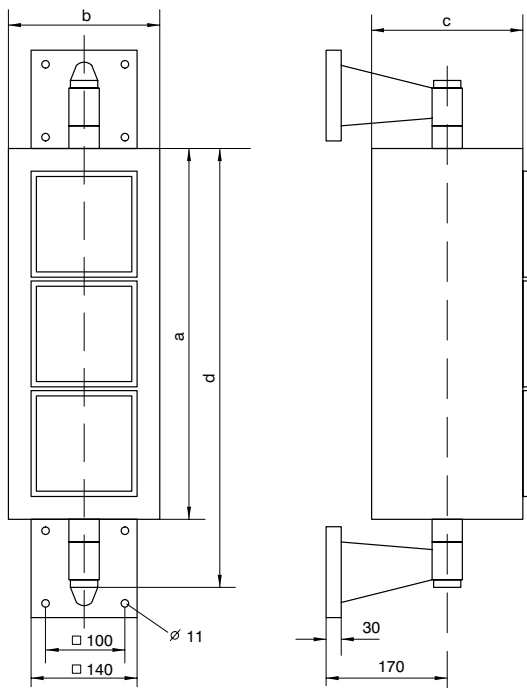
### Dimensions

#### form A, B

(form B: support will be mounted on upper side of wall bracket)

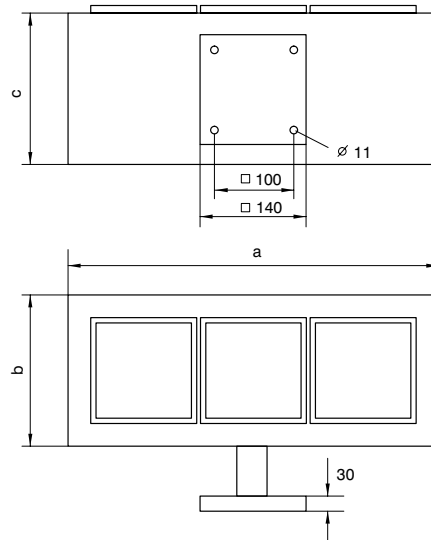


#### form C (WA 144 only)



dimensions (in mm)	WA 96-A/ B	WA 144-A/ B/ C
a	345	487
b	150	200
c	160	200
d	414	556

#### form D



dimensions (in mm)	WA 96-D	WA 144-D
a	345	487
b	150	200
c	160	200

## Ordering Information

<b>type</b> <b>WA</b>	Wall Bracket empty
<b>dimensions</b> <b>96</b>	accommodating instruments 96 mm x 96 mm
<b>144</b>	accommodating instruments 144 mm x 144 mm
<b>form</b> <b>A</b>	bracket upright, bottom support <sup>1)</sup> bracket suspended, support on top bracket upright, support on top and bottom <sup>2)</sup> bench-type bracket, bottom support
<b>B</b>	
<b>C</b>	
<b>D</b>	

<sup>1)</sup> standard

<sup>2)</sup> WA 144 only

### ordering example 1

Wall Bracket WA 144-B, empty

<b>type</b> <b>WA</b>	Synchronizing Wall Bracket
<b>dimensions</b> <b>96</b>	accommodating instruments 96 mm x 96 mm
<b>144</b>	accommodating instruments 144 mm x 144 mm
<b>form</b> <b>A</b>	bracket upright, bottom support <sup>1)</sup> bracket suspended, support on top bracket upright, support on top and bottom <sup>2)</sup> bench-type bracket, bottom support
<b>B</b>	
<b>C</b>	
<b>D</b>	
<b>combination</b> <b>SY 96/144 S</b>	meter refer to data sheet No. synchronoscope 080.D.101.##
<b>WQ 96/144 /2S</b>	dual voltmeter 023.D.101.##
<b>FQ 96/144 /2</b>	dual frequency meter 031.D.101.##
or	
<b>WQ 96/144 /0S</b>	null voltmeter 022.D.101.##
<b>WQ 96/144 /2S</b>	dual voltmeter 023.D.101.##
<b>FQ 96/144 /2</b>	dual frequency meter 031.D.101.##
<b>assembly</b>	mount and connect instruments, install connection leads

<sup>1)</sup> Standard

<sup>2)</sup> WA 144 only

### ordering example 2

Synchronizing Wall Bracket WA 96-A

comprising instrument combination:

Synchronoscope SY 96 S,

Dual Voltmeter WQ 96 /2S and

Dual Frequency Meter FQ 96 /2, 2x 21 reeds

rated voltage 400 V, rated frequency 50 Hz,

installed and wired

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– specifications subject to change without notice; date of issue 12/10 –

