DISTRIBUTOR AND DISTRIBUTOR WITH EXTRACTION OF SQUARE ROOT (NON-ISOLATED) WVP-DB/DBA/DBR



These plug-in signal distributors can be employed in combination with a 2-wire transmitter. They supply the prescribed DC power to the transmitter in the field through signal lines.

The DBR type is equipped with a square root extractor.

Features

- Provided with two pairs of output signal terminals per
- The small-sized plug-in type is easy to handle.
- Does not deliver signals in excess of approximately 25 mA, even in case the output is short-circuited.

Specifiation Model WVP-DB Distributor Output-1 Output-2 Distributor compatible with Between Terminals DBA **Between Terminals** smart transmitter Non-isolated Nos. 3 and 4 Nos. 5 and 6 DC 1-5 V DC 1-5 V DBR Distributor with extraction DC 4-20 mA DC 4-20 mA of square root *discontinued В DC 1-5 V DC 4-20 mA Supply Voltage 20 AC 100 V ± 10%, 50/60 Hz 21 AC 200 V ± 10%. 50/60 Hz Transmitter Power Supply 50/60 Hz AC 110 V ± 10%, **IDC 24 V** 50/60 Hz 23 AC 220 V ± 10%, *Code 22 & 23 discontinued

Distributor (Type DB and DBA)

Transmitter signal:

4 to 20 mA, DC (input resistance 250 Ω)

Output signal:

1 to 5 VDC or 4 to 20 mA, DC (number of outputs: 2)

Accuracy:

±0.1% · fs (at 23°C)

Output voltage:

24 VDC ±1 V

Influence of load variation:

Output voltage variation less than 2% Type DB: Max. 22 mA

Output current:

Type DBA: Max. 40 mA (ripple less than 10 mVp-p)

Power consumption:

Approx. 3 VA

Operating temperature and humidity: -5 to +55°C, 90% RH or less (without condensation)

Insulation resistance:

100 $\mbox{M}\Omega$ or more with a 500 VDC megger between the input/output terminal and

power supply terminal

Dielectric strength:

2,000 VAC for 1 minute between the input/output terminal and power supply

terminal

Influence of supply voltage:

±0.1% · fs/rated voltage ±10%

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Distributor with Extraction of Square root (Type DBR)

Transmitter signal:

4 to 20 mA, DC (input resistance 250 Ω)

Output signal:

1 to 5 VDC or 4 to 20 mA, DC (number of outputs: 2)

Accuracy:

±0.2% · fs

Response time:

25 msec (time to reach 90% of the final value)

Output voltage:

24 VDC ± 1 V

Influence of load variation:

Output voltage variation less than 2%

Output current:

Max. 25 mA (ripple less than 10 mVp-p)

Influence of ambient temperature:

Operating temperature and humidity: -5 to +55°C, 90% RH or less (without condensation)

±0.2% · fs/10°C

Insulation resistance:

100 M Ω or more with a 500 VDC megger between the input/output terminal and

power supply terminal

Dielectric strength:

2,000 VAC for 1 minute between the input/output terminal and power supply

terminal

Power consumption:

Approx. 4 VA (AC)

Influence of supply voltage:

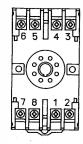
±0.1% ·fs/rated voltage ±10%

Zero & span adjustment: **Output shutdown:**

±20% · fs each (multi-turn trimmer) This function forcibly cuts off the output in cases where the output falls below

10% of the rating.

Explanation of Functions



No.	Symbol		Description
1	INPUT	+	TRANSMITTER
2		-	
3	OUTPUT-1	+	Output signal (1)
4			
5	OUTPUT-2	+	Output signal (2)
6		1970	
7	POWER	U (+)	Power supply
8		V (-)	