

Excitation and Amplifier Unit for Torque-Sensors

Type VVE-DR

- 19"-Plug-In Technique
- Freely Scaleable
- Easy Calibration of the Sensors by Control Keys
- Signal Input $0...±5\text{ V}$ ($0...±10\text{ V}$)



SPECIFICATION:

VVE-DR is an excitation and amplifier unit in 19"-plug-in technique. This unit is conceived for sensors of 5 V or 10 V output for signal processing in accordance with the standard output currents and output voltages. Thus, by a change-over switch, the measuring signal can be amplified by factor 10.

An easy calibration is possible by the front side control key (if the connected sensor has a calibration control - see data sheet).

The sensitivity of the sensor is selected by the front switch. The fine adjustment of amplification and zero point as well as the input filter is adjustable on the front

Moreover, $0...±2\text{ V}$ (Dim.) output for dimension-equitable adaptation of subsequent display units is available.

TECHNICAL DATA:

Type	VVE-DR
Art. No.	42243

Evaluation Side

Supply	Supply Voltage	230 V AC +15% -6%
Signal Output	Output Signal	$±10\text{ V} ≤ 5\text{ mA}$
	Gain Drift	$<0.05\%/10\text{ K}$
	Zero Point Drift	$<0.05\%/10\text{ K}$
	Ripple	$<20\text{ mV}$
	Common Mode Suppression	$>100\text{ dB}$
	Control	Yes

Sensor Side

Excitation	Excitation Voltage for Sensor	$±15\text{ V} / ±5\text{ V}$ stabilized
Signal Input	Excitation Current for Sensor	$≤200\text{ mA}$
	Input Voltage	$0...±5\text{ V}$ ($0...±10\text{ V}$)
	Input Resistance	$10\text{ k}\Omega$
	Input Filter	$10\text{ Hz}...1\text{ kHz} -3\text{ dB}$, adjustable

Miscellaneous

Nominal Temperature Range	$+10...+40\text{ °C}$
Service Temperature Range	$0...+60\text{ °C}$
Storage Temperature Range	$-10...+70\text{ °C}$
Excitation Voltages for more Cards	$±15\text{ V} / +5\text{ V}$, stabilized, each 200 mA
Output Voltage for Digital Voltmeter	$0...±2\text{ V RL} >500\ \Omega$
Dimensions	3 HE 10 TE 160 mm deep

Options	Art. No.	Function
I4	42725	Output Signal 4...20 mA
I0	42724	Output Signal 0...20 mA
I±	42723	Output Signal $0...±20\text{ mA}$
I12	42722	Output Signal $12±8\text{ mA}$
EVK	42245	Mounting, Wiring and Calibration