Converters

Narrow profile transducers

Electrical parameter transducer in a process signal

Description

- Convert voltage, current or frequency in a single-phase system
- Very competitive quality / price ratio
- Ideal for small installations
- Very reliable and robust devices
- Valid for work under demanding conditions

Application

- Systems for the conversion of the electrical parameters of single-phase networks in industrial environments where there are demanding conditions and there is a reduced space.
- Converts voltage, current or frequency into a single-phase system in analogue output or process signal.
- Conversion of electrical parameter signal to process signal for PLCs.

Features

	CVE-A	CCE	CFE
Power supply circuit	230 Vac (-15 ... +20 %) (*1)		
Frequency	40 ... 90 Hz		
Consumption	2.5 V·A		
Measurement circuit			
Consumption	< 0.2 V·A		
Frequency	45 ... 65 Hz		
Nominal voltage (U_n)	0..0.690 Vac	-	10..0.600 Vac
Nominal current (I_n)	-	5 A ac	-
Measurement range	5-120 % (*2)		
Overload (permanent)	-	300 % I_n	-
Overvoltage	1000 V	-	1000 V
Analogue output circuit			
Voltage load impedance	> 500		
Current load impedance	< 500		
Response time	< 300 ms		
Rippling, in TRMS	< 0,5 %		
Insulation			
Test voltage	3 kV		
Impulse test	4 kV		
Ambient conditions			
Storage temperature	-40 ... +70 ºC		
Operating temperature	-10 ... +55 ºC		
Altitude	2000 m		
Build features			
Box material	ABS V0		
Degree of protection	Box: IP 20 / Front panel: IP 54		
Weight (g)	190	250	190
Standards	**IEC 529, IEC 688, IEC 801, EN 50081-1, EN 50082-1**		

(*1) For other types of power supply, see the coding table
(*2) CVE-A-AP i CFE-AP: Measurement range 70-110 %

Narrow profile transducers

Converter of electrical parameters into process signals

References

Standard auxiliary power supply: 230 Vac, 45...65 Hz (*)

For non-standard purchase orders, please state the following: 1.Code, 2.Input range, 3.Output range, 4.Auxiliary power supply, 5. In **CFE-AP**, state the network voltage. (See coding table)

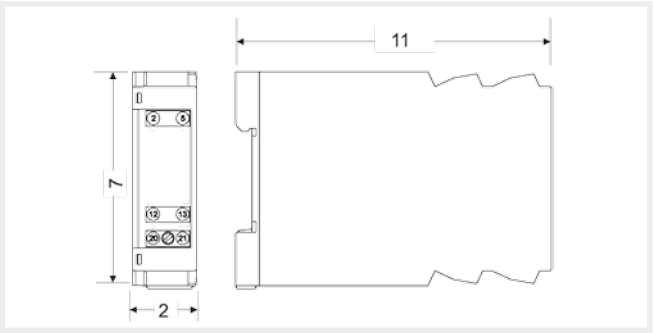
Application	Measurement	Accuracy	Input (*)	Output (*)	Type	Code
Voltmeter	AC	0.5 % FE	300 V	4...20mA	**CVE-A**	**M25011**
Voltmeter (*1)			230 V	0...20mA	**CVE-A-AP**	**M25021**
Ammeter			5 A	4...20mA	**CCE-A**	**M25111**
Ammeter (*1)				0...20mA	**CCE-A-AP**	**M25121**
Frequency-meter			45..0.55 Hz	4...20mA	**CFE**	**M25511**
Frequency-meter (Self-powered)				0...20mA	**CFE-AP**	**M25521**

(*1) Self-powered: does not need an auxiliary power supply.
(*) Other inputs, outputs and auxiliary power supplies are offered as an option (See coding table).

Coding table

		M	2	X	X	X	X	0	0	X	X	X	X	X
1	Code							Internal Code						
2 - INPUTS	CVE-A Voltage									Standard (300 V)	0			
										110 V	1			
										400 V	2			
										500 V	3			
										690 V	4			
	CVE-A-AP Voltage									Standard (230 V)	0			
										110 V	1			
										400 V	2			
	Current									Standard (5 A)	0			
										1 A	1			
										10 A	4			
	Frequency									Standard (45...55 Hz)	0			
										55...65 Hz	1			
										47..0.53 Hz	2			
										45...65 Hz	3			
										0..0.100 Hz	4			
										380..0.420 Hz	5			
										360..0.440 Hz	6			
										340..0.460 Hz	7			
3 - OUTPUTS	CVE-A, CCE-A, CFE											Standard (4...20 mA)	0	
												0...20 mA	1	
												0..0.10 V	2	
												2..0.10 V	3	
	CVE-A-AP, CCE-A-AP, CFE-AP											Standard (0...20 mA)	0	
												0..0.10 V	1	
4	Auxiliary power supply													Standard (220...240 V) 0
														380...40 Vac 40/60 Hz 3
														18...36 Vdc 7
5	Network voltage (CFE-AP)													Standard (230 V) 0 0
														110 V 0 1
														400 V 0 2

Dimensions



Connections