

**Your process signals requires extreme care
With our products you will be safe
Let's connect.**

Signal converters



Signal converters ACT20M

- width 6 mm saves space in the control cabinet
- simple configuration with DIP switches
- wide operating temperature range from -25 to + 70°C
- galvanic isolation up to 2.5 kV
- accuracy up to 0.05%
- possibility of using power bus
- wide product range
- international approvals



Order number	Designation	Number of channels	Input	Output	Settings	Power	Accuracy
1175980000	ACT20M-ClCo-S	1	0 (4) .. 20 mA passive 0 (4) .. 20 mA active 0(1) .. 5V 0(2) .. 10V -20mA..0..+20mA -10..0..+10mA -10(-5)..0..+10(+5)V P100_2,3,4-wire Thermocouple J,K	0(4) .. 20mA passive 0(4) .. 20mA active 0(1) .. 5V 0(2) .. 10V -20mA..0..+20mA -10..0..+10mA -10(-5)..0..+10(+5)V P100_2,3,4-wire Thermocouple J,K	DIP switch FDT software	Auxiliary power 24VDC Output loop powered Input loop powered	≤ 0,05%
1176000000	ACT20M-AiAoS	1	• • • • •	• • • • •	•	•	≤ 0,05%
1176010000	ACT20M-AiAO-E-S	1	• • • • •	• • • • •	•	•	≤ 0,2%
1375450000	ACT20M-BaiAO-S	1	• • • • •	• • • • •	•	•	≤ 0,05%
1175990000	ACT20M-Cl2Co-S	1	•	•	•	•	≤ 0,05%
1176020000	ACT20M-Ai2AO-S	1	• • • • •	• • • • •	•	•	≤ 0,05%
1375470000	ACT20M-Bai2AO-S	1	• • • • •	• • • • •	•	•	≤ 0,05%
1176070000	ACT20M-ClCoLPS	1	•	•	•		≤ 0,1%
1176080000	ACT20M-2Cl2CoLPS	2	•	•	•		≤ 0,1%
1176040000	ACT20M-ClCoOLPS	1	•	•		•	≤ 0,05%
1176050000	ACT20M-2Cl2CoOLPS	2	•	•		•	≤ 0,05%
1435590000	ACT20M-RTClCoOLPS	1		• • •	•	•	≤ 0,05%
1435610000	ACT20M-RTiCoEOLPS	1		• •	•	•	≤ 0,1%
1375510000	ACT20M-RTiAO-S	1		• • •	•	•	≤ 0,05%
1375520000	ACT20M-RTiAO-E-S	1		• • •	•	•	≤ 0,1%
1375480000	ACT20M-TClAO-S	1		• • •	•	•	≤ 0,05%
1375500000	ACT20M-TClAO-E-S	1		• • •	•	•	≤ 0,1%
1176030000	ACT20M-UiaOS	1	• • • • •	• • • • •	•	•	≤ 0,1%

Signal converters ACT20P

- customisable protection against mismatching
- simple configuration with DIP switches
- wide operating temperature range from -20 to + 70°C
- galvanic isolation up to 4kV
- accuracy up to 0.05%
- suitable for HART transparent communication
- wide product range
- international approvals



Order number	Type	Number of channels	Input	Output	Settings	Power	Accuracy	Suitable for HART transparent communication
7760054114	ACT20P-Cl-CO	1	0(4)...20mA passive 0(4)...20mA active 0(1)...5V 0(2)...10V -20mA...0...+20mA -10...0...+10mA -10(-5)...0...+10(+5)V P100 2,3,4 wire	0(4)...20mA passive 0(4)...20mA active 0(1)...5V 0(2)...10V -20mA...0...+20mA -10...0...+10mA	DIP switch Splitter	Auxiliary power 24VDC Output loop powered Input loop powered	≤ 0,1%	•
7760054115	ACT20P-Cl-2CO	1	• •	•			≤ 0,1%	•
7760054117	ACT20P-2Cl-2CO-12	2	•	•			≤ 0,1%	•
	Universal converters	Input				Output		
1481970000	ACT20P-PRO DCDC II-S	$\pm 0.1\text{mA}... \pm 100\text{ mA}, \pm 20\text{ mV}... \pm 300\text{ V}$				0...±20 mA, 0...±10 V	•	≤ 0,05%
1453210000	ACT20P-UI-AO-DO-LPS	$\pm 5\text{ADC}, 0...300\text{VAC}, \pm 300\text{ VDC}$ PT100 and PT1000 2,3,4 wire, PT200, Ni120, Thermocouples: B, E, J, K, L, N, R, S, T, U				4...20 mA, 20...4 mA	•	≤ 0,1%
	Current measuring transducer with limit monitoring	Input				Output		
1510470000	ACT20P-CMT-10-AO-RCS	0...5/10 A				0...5 V, 0...10 V, -5...+5 V,	•	
1510540000	ACT20P-CMT-30-AO-RCS	0...20/25/30 A				-10...+10V, 0...20 mA,	•	≤ 0,5%
1510440000	ACT20P-CMT-60-AO-RCS	0...40/50/60 A				4...20 mA, -20...+20 mA	•	
	Network-compatible current measuring transducers	Input				Output		
1510240000	ACT20C-CMT-10-AO-RCS	0...5/10 A				0...5 V, 0...10 V, -5...+5 V,	• • •	
1510420000	ACT20C-CMT-60-AO-RCS	0...40/50/60 A				-10...+10V, 0...20 mA, 4...20 mA, -20...+20 mA	• • •	≤ 0,5%
1510370000	ACT20C-GTW-100-MTCPS					communication gateway for Ethernet current measuring transducer	• •	

with display

Signal converters for hazardous area applications ACT20X

- SIL certification
- simple configuration via FDT software
- wide operating temperature range from -20 to + 60°C
- relay output for error alarm
- 1 and 2 channel versions
- customisable protection against mismatching
- international approvals



Order number	Type	Number of channels	Input	Output	Power	Comment
8965430000	ACT20X-HAI-SAO-S	1	0(4)..20mA passive 0(4)..20mA active 0(1)..5V 0(2)..10V PT and Ni sensor Thermocouples	0(4)..20mA passive 0(4)..20mA active 0(1)..5V 0(2)..10V Splitter	Auxiliary power 24VDC Output loop powered	sensors (4-20) in Ex zone
8965440000	ACT20X-2HAI-2SAO-S	2	0(4)..20mA passive 0(4)..20mA active 0(1)..5V 0(2)..10V PT and Ni sensor Thermocouples	0(4)..20mA passive 0(4)..20mA active 0(1)..5V 0(2)..10V Splitter	Auxiliary power 24VDC Output loop powered	analog control (4-20) in Ex zone
8965450000	ACT20X-SAI-HAO-S	1	0(4)..20mA passive 0(4)..20mA active 0(1)..5V 0(2)..10V PT and Ni sensor Thermocouples	0(4)..20mA passive 0(4)..20mA active 0(1)..5V 0(2)..10V Splitter	Auxiliary power 24VDC Output loop powered	temperature sensors
8965460000	ACT20X-2SAI-2HAO-S	2	0(4)..20mA passive 0(4)..20mA active 0(1)..5V 0(2)..10V PT and Ni sensor Thermocouples	0(4)..20mA passive 0(4)..20mA active 0(1)..5V 0(2)..10V Splitter	Auxiliary power 24VDC Output loop powered	universal
8965470000	ACT20X-HT1SAO-S	1	0(4)..20mA passive 0(4)..20mA active 0(1)..5V 0(2)..10V PT and Ni sensor Thermocouples	0(4)..20mA passive 0(4)..20mA active 0(1)..5V 0(2)..10V Splitter	Auxiliary power 24VDC Output loop powered	universal - loop powered
8965480000	ACT20X-2HT1-2SAO-S	2	0(4)..20mA passive 0(4)..20mA active 0(1)..5V 0(2)..10V PT and Ni sensor Thermocouples	0(4)..20mA passive 0(4)..20mA active 0(1)..5V 0(2)..10V Splitter	Auxiliary power 24VDC Output loop powered	for digital signals (relay)
8965490000	ACT20X-HUI-SAO-S	1	0(4)..20mA passive 0(4)..20mA active 0(1)..5V 0(2)..10V PT and Ni sensor Thermocouples	0(4)..20mA passive 0(4)..20mA active 0(1)..5V 0(2)..10V Splitter	Auxiliary power 24VDC Output loop powered	for digital signals (relay)
1318220000	ACT20X-HUI-SAO-LP-S	1	0(4)..20mA passive 0(4)..20mA active 0(1)..5V 0(2)..10V PT and Ni sensor Thermocouples	0(4)..20mA passive 0(4)..20mA active 0(1)..5V 0(2)..10V Splitter	Auxiliary power 24VDC Output loop powered	for digital signals (relay)
8965340000	ACT20X-HDI-SDO-RNO-S	1	digital input - NAMUR	relay 1NO	Auxiliary power 24VDC Output loop powered	for controlling valves in Ex zone IIC (≤ 35 mA)
8965370000	ACT20X-2HDI-2SDO-RNO-S	2	digital input - NAMUR	relay 1NO	Auxiliary power 24VDC Output loop powered	for controlling valves in Ex zone IIC (≤ 35 mA)
8965350000	ACT20X-HDI-SDO-RNCS	1	digital input - NAMUR	relay 1NC	Auxiliary power 24VDC Output loop powered	for digital signals (relay)
8965380000	ACT20X-2HDI-2SDO-RNCS	2	digital input - NAMUR	relay 1NC	Auxiliary power 24VDC Output loop powered	for digital signals (relay)
8965360000	ACT20X-HDI-SDO-S	1	digital input - NAMUR	NPN transistor	Auxiliary power 24VDC Output loop powered	for digital signals (relay)
8965390000	ACT20X-2HDI-2SDO-S	2	digital input - NAMUR	NPN transistor	Auxiliary power 24VDC Output loop powered	for digital signals (relay)
8965400000	ACT20X-SDIHD0L-S	1	digital signal	digital signal	Auxiliary power 24VDC Output loop powered	for controlling valves in Ex zone IIC (≤ 35 mA)
8965420000	ACT20X-2SDI-2HD0-S	2	digital signal	digital signal	Auxiliary power 24VDC Output loop powered	for controlling valves in Ex zone IIC (≤ 35 mA)
8965410000	ACT20X-SDIHD0H-S	1	digital signal	digital signal	Auxiliary power 24VDC Output loop powered	for controlling valves in Ex zone IIB (≤ 60 mA)
8978580000	CBX200 USB					USB interface adapter for configuring signal converters via FDT software

Ex zone

Other types of converters

Order number	Type	Number of channels	Input	Output	Power	Comment
			0(4)..20mA passive 0(4)..20mA active 0(1)..5V 0(2)..10V PT and Ni sensor Thermocouples Frequency	0(4)..20mA passive 0(4)..20mA active 0(1)..5V 0(2)..10V Frequency	Auxiliary power 24VDC Output loop powered	
8581180000	WAS4 PRO Freq	1			●	frequency conversion to analog signal
8939670000	WAS6 TTA	1	● ● ● ● ●	● ● ● ● ●	●	parameterized universal
8461470000	MCZ VFC 0-10V	1	●		●	converting analog signal to frequency
8461480000	MCZ CFC 0-20MA	1	●		●	converting analog signal to frequency
8461490000	MCZ CFC 4-20MA	1	●		●	converting analog signal to frequency
8389030000	AP MCZ1.5		strain gauges		●	endplate for MCZ
1067250000	ACT2OP-BRIDGE-S				●	weighing

Signal surge protection



- increases the reliability of your process applications
- possibility of linking the signal path
- only 6.2 mm wide module
- quick PE contact to DIN rail
- possibility of using measuring with 2.3 mm test plug



Order number	Type	Usage
1064170000	VSSC6 CL 24VAC/DC 0.5A	For analog signal.
1064270000	VSSC6 CLFG24VAC/DC 0.5A	For analog signals, with integrated PE foot.
1064230000	VSSC6 TRCL24VAC/DC 0.5A	For analog signal, the possibility of linking the signal path.
1064310000	VSSC6 TRCLFG24VAC/DC 0.5A	For analog signal, FG, possibility of linking the signal path.
1066490000	VSSC6 TRCLFG24VAC/DC EX	For analog signal, FG, possibility of linking the signal path for signals from hazardous areas.
1063110000	AP VSSC6	End plate for overvoltage protections.

• complete range of converters and surge protection can be found in our product catalogs

Weidmüller – Your partner in Industrial Connectivity

As experienced experts we support our customers and partners around the world with products, solutions and services in the industrial environment of power, signal and data. We are at home in their industries and markets and know the technological challenges of tomorrow. We are therefore continuously developing innovative, sustainable and useful solutions for their individual needs. Together we set standards in Industrial Connectivity.

WeidmüllerInterface GmbH & Co.KG
Representative Office
Estonia, Latvia, Lithuania

Udens street 12 - 114
Riga, LV-1007, Latvia
Phone: +371 660 516 16
office_cis_europe@weidmueller.de

www.weidmueller.ee
www.weidmueller.lv
www.weidmueller.lt