



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: **IECEX UL 18.0141X** Page 1 of 3 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2019-03-29

Applicant: **Weidmüller Interface GmbH & Co. KG**  
Klingenbergstrasse 16  
32758 Detmold  
Germany

Equipment: **Analogue Signal Converter Isolator, ACT20P series**

Optional accessory:

Type of Protection: **Increased Safety "ec"**

Marking: Ex ec IIC T5 Gc  
-20 °C ≤ Tamb ≤ +60 °C

Approved for issue on behalf of the IECEx  
Certification Body:

**Erin LaRocco**

Position:

**Staff Engineer**

Signature:  
(for printed version)

Date:

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2. This certificate is not transferable and remains the property of the issuing body.
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Certificate issued by:

**UL LLC**  
333 Pfingsten Road  
Northbrook IL 60062-2096  
United States of America





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Manufacturer: **Weidmüller Interface GmbH & Co. KG**  
Klingenbergstrasse 16  
32758 Detmold  
**Germany**

Additional  
manufacturing  
locations:

**Shanghai Chenzhu Instrument Co., Ltd.**  
Floor 7~8, Building 6  
No. 201, Minyi Road  
Songjiang District  
Shanghai, 201612  
P.R. China  
**China**

**Weidmuller Interface (Shanghai) Co., Ltd.**  
63A No. 101 HanCheng Rd.  
Free Trade Zone  
Shanghai, 200131  
P. R. China  
**China**

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

#### STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

**IEC 60079-0:2017** Explosive atmospheres - Part 0: Equipment - General requirements  
Edition:7.0

**IEC 60079-7:2017** Explosive atmospheres - Part 7: Equipment protection by increased safety "e"  
Edition:5.1

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

#### TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[US/UL/ExTR18.0164/01](#)

Quality Assessment Reports:

[CN/CQM/QAR10.0001/05](#)

[CN/NEP/QAR18.0011/00](#)

[NL/DEK/QAR12.0052/06](#)



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## **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

These devices are considered Open-Type Analogue Signal Converter, which can connect with 2- or 3- wire transmitter or current source signal. The input and output circuits and the voltage supply are completely electrically isolated. The input signal is converted into a DC current or voltage output. These units do not have a complete electrical enclosure and are to be installed in Industrial Control Equipment in the final installation.

## **SPECIFIC CONDITIONS OF USE: YES as shown below:**

- The equipment shall be installed in an enclosure that provides a minimum ingress protection of IP54 in accordance with IEC 60079-0.
- The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1.
- Transient protection shall be provided that is set at a level not exceeding 140 % of the peak rated voltage value at the supply terminals to the equipment

## **Annex:**

[Annex to IECEx UL 18.0141X Issue 0.pdf](#)



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## TYPE DESIGNATION

Nomenclature for type ACT20P Series:

ACT20P	-	2CI	-	2CO	-	12		P	-	S
1		2		3		4		5		6

1: Product series:

ACT20P

2: Input signal:

CI: Type with one channel of current input signal

2CI: Type with two channels of current input signal

3: Output signal:

CO: type with one channel of current output signal

2CO: type with two channels of current output signal

VO: type with one channel of voltage output signal

4: Variants Width:

Blank: 12.5mm width, for models except for ACT20P-2CI-2CO series

12: 12.5mm width, only for ACT20P-2CI-2CO series.

5: Din rail bus power connector:

Blank: Normal type

P: Type support Din rail bus power connector

6: Input/Output connector type:

S: Type with screw connector

P: Type with push-in connector



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## PARAMETERS RELATING TO THE SAFETY

Cat. No.	Supply	Input		Output	
		Current Range	Signal input	Voltage	Current
ACT20P-CI-VO-S ACT20P-CI-VO-P ACT20P-CI-VO-P-S ACT20P-CI-VO-P-P	20-30 V dc, 60 mA	0~20 mA or 4~20 mA	2- or 3-wire transmitter, current source	0~10 V or 2~10 V	-
ACT20P-CI-CO-S ACT20P-CI-CO-P ACT20P-CI-CO-P-S ACT20P-CI-CO-P-P	20-30 V dc, 60 mA	0~20 mA or 4~20 mA	2- or 3-wire transmitter, current source	-	0~20 mA or 4~20 mA
ACT20P-CI-2CO-S ACT20P-CI-2CO-P ACT20P-CI-2CO-P-S ACT20P-CI-2CO-P-P	20-30 V dc, 75 mA	0~20 mA or 4~20 mA	2- or 3-wire transmitter, current source	-	0~20 mA or 4~20 mA
ACT20P-2CI-2CO-12-S ACT20P-2CI-2CO-12-P ACT20P-2CI-2CO-12-P-S ACT20P-2CI-2CO-12-P-P	20-30 V dc, 100 mA	0~20 mA or 4~20 mA	current source	-	0~20 mA or 4~20 mA

## MARKING

Marking has to be readable and indelible; it has to include the following indications:

Bar code drawing for whole series:



Part\_1 : BarCode of 'Part\_2';

Part\_2 : P + 2-Bit(Manufacture Year) + 6-bit(Random non-repetitive pipeline code);

Part\_3 : Unique Manufacture code associated with product model;

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Representative Label	Represent Models																																																						
<p><b>Analogue Signal Converter</b> 2489680000 ACT20P-CI-CO-P</p> <p>DEMKO 18 ATEX 1861X IECEx UL 18.0141X</p> <p>Ex ec IIC T5 Gc</p> <p>CE</p> <p>UL LISTED (MEASURING AND TESTING EQUIPMENT) E469563</p> <p>UL LISTED (MEASURING AND TESTING EQUIPMENT) E469563</p> <p>E338066 PROC. CONT. EQ FOR HAZ. LOC. Cl 1, DIV 2 GP A, B, C, D Temp Code T5</p> <p>Power Supply: Input: 20-30V DC 60mA Output: 0/4-20mA 0/4-20mA</p> <table border="1"> <thead> <tr> <th>Terminal</th> <th>In- Current Source</th> <th>In- Three-Wire Transmitter</th> <th>In- Two-Wire Transmitter</th> <th>Out- Current</th> <th>Power Supply</th> </tr> </thead> <tbody> <tr> <td>11</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>12</td> <td>mA+</td> <td>Loop+</td> <td>Loop+</td> <td></td> <td></td> </tr> <tr> <td>21</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>22</td> <td>mA-</td> <td>Loop-(mA-)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>41</td> <td></td> <td></td> <td></td> <td>mA+</td> <td></td> </tr> <tr> <td>42</td> <td></td> <td></td> <td></td> <td>mA-</td> <td></td> </tr> <tr> <td>51</td> <td></td> <td></td> <td></td> <td></td> <td>24V</td> </tr> <tr> <td>52</td> <td></td> <td></td> <td></td> <td></td> <td>GND</td> </tr> </tbody> </table> <p>-20°C ≤ T<sub>amb</sub> ≤ +60°C</p>	Terminal	In- Current Source	In- Three-Wire Transmitter	In- Two-Wire Transmitter	Out- Current	Power Supply	11						12	mA+	Loop+	Loop+			21						22	mA-	Loop-(mA-)				41				mA+		42				mA-		51					24V	52					GND	<p>ACT20P-CI-CO-S ACT20P-CI-CO-P-S ACT20P-CI-CO-P ACT20P-CI-CO-P-P</p>
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**Analogue Signal Converter**  
2489710000 ACT20P-CI-2CO-P

**Weidmüller**  
Weidmüller Interface GmbH & Co. KG  
Klingenbergstr. 16  
D-32758 Detmold

See data sheet for installation instructions

Power Supply: Input: 20-30V DC 75mA, Output: 0/4-20mA

Terminal	In- Current Source	In- Three-Wire Transmitter	In- Two-Wire Transmitter	Out 1- Current	Out 2- Current	Power Supply
11		Loop+	Loop+			
12	mA+	mA+	Loop-			
21						
22	mA-	Loop-(mA-)				
41				mA+		
42				mA-		
51					mA+	
52					mA-	
61						24V
62						GND

-20°C ≤ T<sub>amb</sub> ≤ +60°C

ACT20P-CI-2CO-S  
ACT20P-CI-2CO-P-S  
ACT20P-CI-2CO-P  
ACT20P-CI-2CO-P-P

DEMKO 18 ATEX 1861X  
IECEx UL 18.0141X  
Ex ec IIC T5 Gc

CE

UL US LISTED E338066 PROC. CONT. EQ FOR HAZ. LOC. Cl 1, Div 2 GP A, B, C, D Temp Code T5

UL US LISTED (MEASURING AND TESTING EQUIPMENT) E469563

**Analogue Signal Converter**  
2489730000 ACT20P-2CI-2CO-12-P

**Weidmüller**  
Weidmüller Interface GmbH & Co. KG  
Klingenbergstr. 16  
D-32758 Detmold

See data sheet for installation instructions

Power Supply: Input: 20-30V DC 100mA, Output: 0/4-20mA

Terminal	In 1- Current Source	In 2- Current Source	Out 1- Current	Out 2- Current	Power Supply
11					
12	mA+				
21		mA-			
22	mA-				
31					
32		mA+			
41			mA+		
42			mA-		
51				mA+	
52				mA-	
61					24V
62					GND

-20°C ≤ T<sub>amb</sub> ≤ +60°C

ACT20P-2CI-2CO-12-S  
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