

CONDI 3400 (X)-051 Module Specifications

CondI input*)	For SE 655/SE 656 toroidal sensors (and others)		
	Measuring ranges	SE655/SE656:	0000 µS/cm ... 2,000 mS/cm Resolution 1 µS/cm
Temperature input*)	Concentration	0.0 ... 100.0 wt%	
	Salinity	0.0 ... 45.0 g/kg (0 ... 35 °C)	
	Response time (T_{90})	< 0.5 s	
	Measurement error ¹⁾	< 0.5 % of measured value + 2 µS/cm	
	Permissible cable length	Max. 20 m	
	Pt100 / Pt1000 / NTC 30 / NTC 100 kΩ ^{*)} , 3-wire connection, adjustable		
Temperature compensation*)	Measuring range	Pt100 / Pt1000: NTC 30 kΩ	-50 ... 250 °C / -58 ... 482 °F -10 ... 150 °C / 14 ... 302 °F
	Resolution	0.1 °C/°F	
Concentration determination ^{*)} (SW3400-009/FW4400-009)	Measurement error ²⁾	0.2 % of measured value + 0.5 K	
	– None		
	– Linear characteristic 00.00 ... 19.99 %/K (adjustable reference temperature)		
	– NLF natural waters according to EN 27888 (reference temperature 25 °C/77 °F)		
	HNO ₃	0 ... 30 wt%	-20 ... 50 °C / -4 ... 122 °F
		35 ... 96 wt%	-20 ... 50 °C / -4 ... 122 °F
	HCl	0 ... 18 wt%	-20 ... 50 °C / -4 ... 122 °F
		22 ... 39 wt%	-20 ... 50 °C / -4 ... 122 °F
	H ₂ SO ₄	0 ... 37 wt%	-17.8 ... 110 °C / -0.04 ... 230 °F
		28 ... 88 wt%	-17.8 ... 115.6 °C / -0.04 ... 240.08 °F
		89 ... 99 wt%	-17.8 ... 115.6 °C / -0.04 ... 240.08 °F
	NaOH	0 ... 24 wt%	0 ... 100 °C / 32 ... 212 °F
		15 ... 50 wt%	0 ... 100 °C / 32 ... 212 °F
	NaCl	0 ... 28 wt%	0 ... 100 °C / 32 ... 212 °F
	H ₂ SO ₄ •SO ₃ (Oleum)	12 ... 45 wt%	0 ... 120 °C / 32 ... 248 °F
	Specifiable concentration table (5x5 values)		
Sensor monitoring*)	Sensocheck, monitoring of primary coil and wires for short circuits, and of the secondary coil for open circuits		
Sensoface	Provides information on the condition of the sensor		
Sensor adjustment*)	Operating modes: – Automatic with NaCl or KCl solution – Manual: Input of cell constant with simultaneous display of conductivity value and temperature – Product calibration/vessel adjustment – Zero point adjustment – Data entry of premeasured sensors		
Calibration record	Permissible cell factor	0.000 ... 19.99 cm ⁻¹	
Output curve*)	Permissible transfer ratio	0.00 ... 199.9	
	Recording of: Cell factor, transfer ratio, zero point, calibration procedure with date and time – Linear		

Protos 3400 (X)

CONDI 3400 (X)-051 Module Specifications - *Continued*

	<ul style="list-style-type: none"> - Trilinear - Function - As desired via table 																
Explosion protection	See Ex Certificates and EU Declaration of Conformity or www.knick.de																
EMC	NAMUR NE 21 and EN 61326-1, EN 61326-2-3																
	Emitted interference	Industrial applications ⁷⁾ (EN 55011 Group 1 Class A)															
	Immunity to interference	Industrial applications															
Lightning protection	to EN 61000-4-5, Installation class 2																
Rated operating conditions	<table border="0"> <tr> <td>Ambient temperature</td> <td>Safe area:</td> <td>-20 ... 55 °C / -4 ... 131 °F</td> </tr> <tr> <td>Relative humidity:</td> <td>Ex:</td> <td>-20 ... 50 °C / -4 ... 122 °F</td> </tr> <tr> <td>Climatic class</td> <td>5 ... 95 %</td> <td></td> </tr> <tr> <td>Location class</td> <td>3K5 according to EN 60721-3-3</td> <td></td> </tr> <tr> <td>Transport / storage temperature</td> <td>C1 according to EN 60654-1</td> <td>-20 ... 70 °C / -4 ... 158 °F</td> </tr> </table>		Ambient temperature	Safe area:	-20 ... 55 °C / -4 ... 131 °F	Relative humidity:	Ex:	-20 ... 50 °C / -4 ... 122 °F	Climatic class	5 ... 95 %		Location class	3K5 according to EN 60721-3-3		Transport / storage temperature	C1 according to EN 60654-1	-20 ... 70 °C / -4 ... 158 °F
Ambient temperature	Safe area:	-20 ... 55 °C / -4 ... 131 °F															
Relative humidity:	Ex:	-20 ... 50 °C / -4 ... 122 °F															
Climatic class	5 ... 95 %																
Location class	3K5 according to EN 60721-3-3																
Transport / storage temperature	C1 according to EN 60654-1	-20 ... 70 °C / -4 ... 158 °F															
Housing	<table border="0"> <tr> <td>Module enclosure</td> <td>PC/ABS blend</td> </tr> <tr> <td>Color</td> <td>Black</td> </tr> <tr> <td>Degree of protection</td> <td>IP 20</td> </tr> <tr> <td>Dimensions (mm)</td> <td>118 x 91 x 21 W x L x H</td> </tr> <tr> <td>Terminals</td> <td>Screw clamp connector, single and stranded wires up to 2.5 mm²</td> </tr> </table>		Module enclosure	PC/ABS blend	Color	Black	Degree of protection	IP 20	Dimensions (mm)	118 x 91 x 21 W x L x H	Terminals	Screw clamp connector, single and stranded wires up to 2.5 mm ²					
Module enclosure	PC/ABS blend																
Color	Black																
Degree of protection	IP 20																
Dimensions (mm)	118 x 91 x 21 W x L x H																
Terminals	Screw clamp connector, single and stranded wires up to 2.5 mm ²																

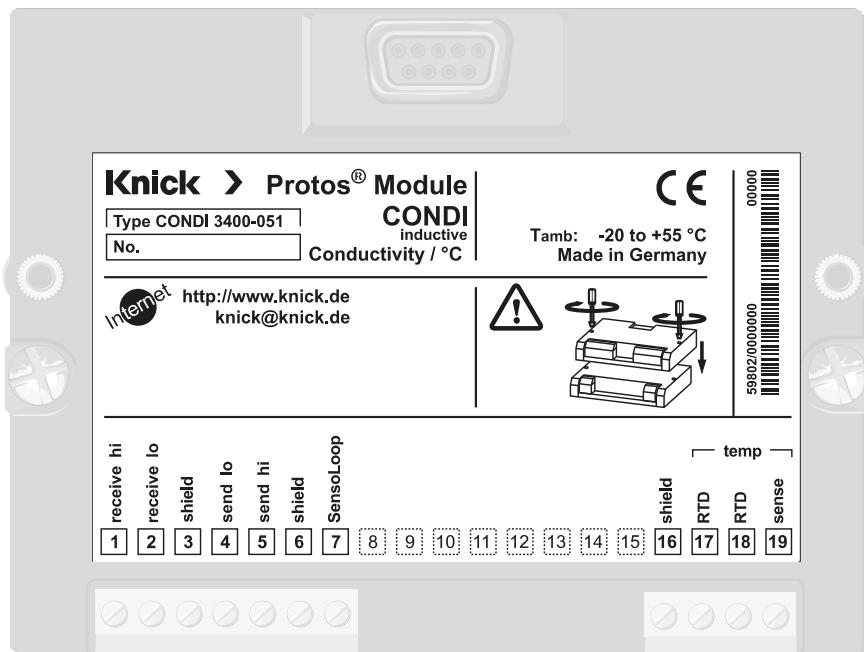
¹⁾ At rated operating conditions, ± 1 count

²⁾ At rated operating conditions, ± 1 count, for NTC > 100 °C/ 212 °F: 0.2 % of measured value + 1 K

³⁾ This equipment is not designed for domestic use, and is unable to guarantee adequate protection of the radio reception in such environments.

^{*)} Adjustable

CONDI 3400 (X)-051 Module Terminal Assignments



Protos 3400 (X)