

Process Analysis Systems

Chem

Energy

Pharm

Food

Water

Protos[®] 3400 (X)

Specifications MS 3400 (X)-160 module

Inputs

Memosens [®]	digital input for Memosens [®] sensors
Power supply	$U_0 = 3.05 \dots 3.15 \text{ V}/6 \text{ mA}$
Interface	RS 485
Transfer rate	9600 Bd
Cable length	max. 100 m
Current input	current input 0/4 ... 20 mA/100 ohms e.g. for external pressure signal
Start/end of scale	as desired within range
Characteristic	linear
Measurement error ¹⁾	< 1% current value + 0.1 mA
CONTROL input	galvanically separated (OPTO coupler)
Function	e.g. flow monitoring
Switching voltage	0 ... 2 V (AC/DC) no flow 10 ... 30 V (AC/DC) flow OK

Approvals

Explosion protection	IECEX: Ex ib [ia] IIC T4 ATEX: II 2 (1) G Ex ib [ia] IIC T4 FM: IS, Class 1, Div 1, GRP A, B, C, D, T4, Entity Class I, Zone 1, A Ex ib [ia], GRP IIC, T4 CSA: NI, Class I, Div 2, GRP A, B, C, D, with IS circuits extending into Div 1 AIS, Class I, Zone 1, Ex ib [ia] IIC T4 NI, Class I, Zone 2, Ex nA [ia] IIC GOST: 1 Ex ib [ia] IIC T4 NEPSI: Ex ib [ia] IIC T4
EMC	EN 61326-1 (General Requirements) Emitted interference: Class B (residential area) Immunity to interference: Industry EN 61326-2-3
Data retention	parameters > 10 years

For up-to-date information, please visit www.knick.de



Specifications MS 3400 (X)-160 module – continued

Nominal operating conditions

Ambient temperature	-20 ... +55 °C
Transport/Storage temperature	-20 ... +70 °C
Relative humidity	10 ... 95 %, not condensing

¹⁾ Acc. to EN 60746-1, at nominal operating conditions

Terminal Assignments MS 3400 (X)-160 module

