SPECIFICATIONS *(continued)*

IQS450 signal conditioner

Output

Voltage output, 3-wire configuration	
• Voltage at min. GAP	: −1.6 V
• Voltage at max. GAP	: −17.6 V
• Dynamic range	: 16 V
• Output impedance	: 500 Ω
• Short-circuit current	: 45 mA
Current output, 2-wire configuration	
• Current at min. GAP	: −15.5 mA
• Current at max. GAP	: −20.5 mA
• Dynamic range	: 5 mA
Output capacitance	: 1 nF
Output inductance	: 100 µH

Supply

Voltage output, 3-wire configuration	
• Voltage	: −20 to −32 V*
• Current	: −13 mA ±1 mA (−25 mA max.)
Current output, 2-wire configuration	
• Voltage	: −20 to −32 V*
• Current	: −15.5 to −20.5 mA
Supply input capacitance	: 1 nF
Supply input inductance	: 100 µH

Environmental

Temperature	
• Operating	: −35 to +85°C*
• Storage	: −40 to +85°C
Humidity	: 95% max. non-condensing. 100% condensing (not submerged).
Protection rating (according to IEC 60529)	: IP40
Vibration (according to IEC 60068-2-26)	: 2 g peak between 10 and 55 Hz
Shock acceleration (according to IEC 60068-2-27)	: 15 g peak (half sine-wave, 11 ms duration)

Physical characteristics

Construction material	: Injection-moulded aluminium
Mounting	: Two or four M4 screws
Dimensions	: See **Mechanical drawings and ordering information on page 11**

*See **Thermal considerations on page 8**.

SPECIFICATIONS *(continued)*

Electrical connections

Input	: Self-locking miniature coaxial connector (female). Note: When connecting, this should be hand-tightened, until locked.
Output and power supply	: Three screw terminals – wire section 2.5 mm^2 max.

Weight

Standard version	: 140 g approx.
Ex version	: 220 g approx.

Signal conditioner with MA130 mounting adaptor (ordering option I1)

Universal DIN rail holder type	: TSH 35
DIN rail type (according to EN 50022 / IEC 60715)	: TH 35-7.5 and TH 35-15
Dimensions	: See **Accessories on page 12**

Thermal considerations

The IQS450 signal conditioner will operate at ambient temperatures as high as 85°C, but to do so, it requires derating of the maximum input voltage. The IQS450 must operate between the minimum supply voltage and the maximum supply voltage, as shown on the following graph.