DIEHL
Metering

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SCYLAR INT 8 GLYCOL VERSION

ENERGY CALCULATOR

APPLICATION

The SCYLAR INT 8 glycol version is a thermal energy calculator allowing the measurement of cooling energy (absorbed thermal energy). It can be used for heating or cooling (dual-function version). The SCYLAR INT 8 glycol version allows the operator to monitor and optimize the remote management; it can be directly connected to a Centralized Technical Management unit, to provide large quantities of instant or saved parameters.

FEATURES

- Cool version
- Heat-transfer fluid: TYFOCOR LS, or other glycol fluids
- Suitable for applications in freezing temperatures down to -10°C (not for regulatory use)
- Low power consumption for enhanced battery lifetime (up to 16 years in standard use)
- Suitable for 2 and 4 wires temperature sensor connection
- Integrated radio option
- Modular version, M-Bus, RS232, RS485, Analog outputs 4-20mA
- Pulse outputs and pulse inputs

GENERAL

		SCYLAR INT 8 Glycol version
Application		TYFOCOR LS or other glycol fluids
Protection class		IP 54
Battery supply		3.6 VDC D-cell up to 16 years lifetime*
Mains supply		24 VAC; 230 VAC / ≤ 0.15 W
Volume pulse input frequency		Max. 200 Hz; pulse durance > 3 ms
Pulse value	l/pulse	1, 10, 100 and 1,000[1]
Temperature sensor type		Pt 500 with 2- or 4- wire leads; Ø 5.2mm
Cable length of temperature sensor		Pt 500: 2/5/10m
Calculation cycle	s	2

[1] Depending on size of flow sensor
*Standard conditions of use and temperature. Theoretical life, with no guarantee

REACH

Information pursuant to Article 33 (1) of Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006:
This product series contains components with the following substances in a concentration of more than 0.1% weight by weight (w/w):
- Lead (CAS no.: 7439-92-1)
- 1,2-dimethoxyethane (CAS no.: 110-71-4)

BASIC FEATURES

		SCYLAR INT 8 Glycol version
Ambient class (MID)		Class E2 + M2
Ambient temperature	°C	0 ... +55
Ambient storage temperature	°C	-25 ... +60 (>35 °C max. 4 weeks)
Communication		3 communication interfaces (e. g. M-Bus + M-Bus + Int. Radio; 2 primary addresses, 1 secondary address)
Integrated Radio		Optional
Interfaces standard		Optical ZVEI interface
Interfaces optional		2 slots for modules with M-Bus, L-Bus, RS232, RS485, pulse output, pulse input, combined pulse in-/output or analogue output

INTEGRATED RADIO

	SCYLAR INT 8 Glycol version
Frequency band	868 or 434 MHz
Type of radio telegram	Open Metering Standard (OMS) profile A & B
Transmission data updating	Online - no time delay between value measurement and data transmission
Data transmission	Unidirectional T1 mode
Sending interval	12s (up to 16 years lifetime*) depending on length of telegram (duty cycle)

*Standard conditions of use and temperature. Theoretical life, with no guarantee

DISPLAY

	SCYLAR INT 8 Glycol version
Display indication	LCD, 8-digit
Units	MWh - kWh - GJ - Gcal - MBtu - gal - GPM - °C - °F - m^3 - m^3/h
Total values	99,999,999 - 9,999,999.9 - 999,999.99 - 99,999.999
Displayed values	Energy - Volume - Flow rate - Power -Temperatures

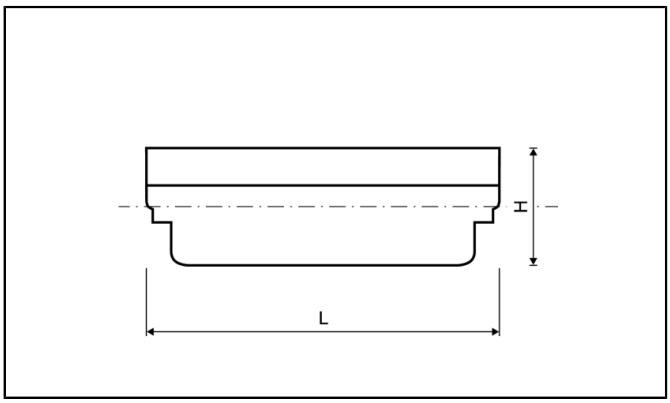
INTERFACES

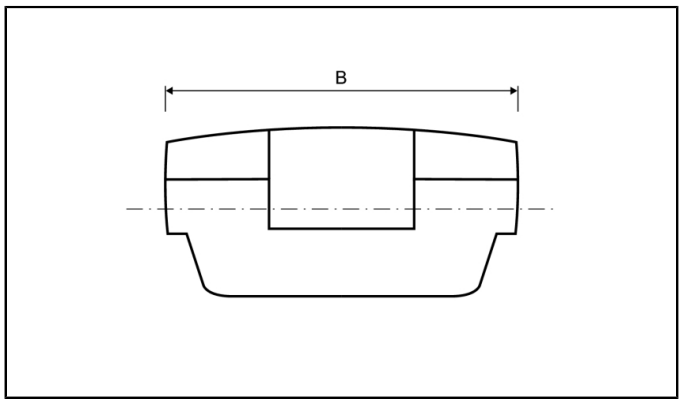
	SCYLAR INT 8 Glycol version
Optical	ZVEI interface, for communication and testing, M-Bus protocol, 2,400 bauds
M-Bus	Configurable telegram according to EN13757-3, data reading and parametrization are via 2 wires with polarity reversal protection, auto baud detect (300 and 2,400 bauds), 2 M-Bus with 2 primary addresses
L-Bus	Adapter for external radio module, configurable telegram according to EN13757-3, data reading and parametrization are via 2 wires with polarity reversal protection
RS232	Serial interface for communication with external devices, a special data cable is required, M-Bus protocol, 300 and 2,400 bauds
RS485	Serial interface for communication with external devices, power supply with 12 V ± 5 V, M-Bus protocol, 2,400 bauds
Pulse output	Module with 2 Open Collector pulse outputs (potential-free), output 1: 4 Hz (pulse width 125 ms), pulse or static conditions (e.g. errors), output 2: 200 Hz (pulse width ≥ 5 ms), ratio: pulse duration / pulse break ~ 1:1, configurable via IZAR@MOBILE 2 software
Pulse input	Module with 2 pulse inputs, max. 20 Hz, configurable via IZAR@MOBILE 2 software, data can be transferred remotely
Combined pulse in-/output	Module with 2 pulse inputs and 1 pulse output, configurable via IZAR@MOBILE 2 software, needed for leak detection
Analogue output	Module for 4 ... 20 mA with 2 programmable passive outputs, programmable value in case of error

TEMPERATURE INPUT

			SCYLAR INT 8 Glycol version
Measuring cycle	T	s	With mains unit: 2s | with D-cell battery: 4s
Starting temperature difference	$\Delta\Theta$	K	0.125
Min. temperature difference	$\Delta\Theta_{min}$	K	3
Max. temperature difference	$\Delta\Theta_{max}$	K	175
Absolute temperature measuring range	Θ	°C	-10 ... +190

DIMENSIONS





			SCYLAR INT 8 Glycol version
Overall length	L	mm	150
Width of calculator	B	mm	100
Height	H	mm	54

Economic Actor Information

Applicable regulation and legal obligations for products may change.

DIEHL METERING monitors applicable regulation to ensure their products comply at the date of placing on the market.

Each economic actor making products available on the market thereafter must independently keep informed about the current applicable regulation.

For questions, please contact: metering-germany-info@diehl.com

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