spirax /sarco

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Spirax EasiHeat [™] HTG (Condensate Control) EN Heating System Compact Heat Transfer Solution

Heating system

Our Spirax EasiHeat[™] HTG incorporating SIMS technology is a complete, compact and ready-to-use steam to water heat transfer solution that delivers superior energy efficient performance. For applications with stable load conditions such as closed circuit heating applications.

Spirax EasiHeat™ HTG can help you lower costs, tackle waste and mitigate your environmental impact by reducing your CO₂ emissions and carbon footprint, making a positive change towards a more sustainable future.

Principal features and benefits:

- Compact heat transfer solution incorporating SIMS technology.
- Energy monitoring, CO₂ emission, Communications, Remote monitoring and SMS or E-mail of system alarms.
- Produces hot water for heating and process.
- Designed for sub-cooling condensate to provide high efficiency.
- Maintains a stable temperature.
- Guaranteed performance.
- Fully assembled and tested ready to install.
- Options to suit all applications.



Heat exchanger

One of the components that guarantees system performance is the heat exchanger, which is precisely engineered to match the specific duty requirements.

With a high efficiency and low volume to pressure ratio. The plate and frame heat exchanger ensures reduced inspection requirements whilst being fully maintainable and expandable.

Condensate control

One of the components that guarantees system performance is the correctly selected control valve with either electric or pneumatic actuation, and ensures all of the useful energy in the steam is used within the unit, there's less waste than other available alternatives which, in turn, reduces both fuel demand and your CO₂ emissions.



Control panel

The Spirax EasiHeat™ HTG now features our new innovative control system incorporating SIMS technology, delivering increased monitoring and communications.

A colour touch screen provides ease of use and clear visual access to all system parameters and access to energy data.

Metering

The TVA flowmeter has been specifically designed for large turndown on steam applications and is a key component of the Spirax EasiHeat™ HTG guaranteeing accurate measurement of energy usage.

Pipework

All pipework is correctly sized for the application and is fabricated using modern welding techniques, approved welders and weld procedures. Flanged products are used for reliability and easy maintenance.

Materials

Steam and condensate pipework	Carbon steel
Steam control valve	Cast iron
Secondary pipework	Carbon steel

Pressure and temperature limits

Pipework design condition	PN16			
Maximum saturated steam supply pressure to heat exchanger	4 bar a (58.0 psi a)			
Maximum secondary pressure	10 bar a (145 psi a)			
Maximum secondary temperature	105 °C (221 °F)			
Maximum gasket temperature	180 °C (356 °F)			

Electrics and pneumatics

All control equipment is pre-wired and piped ready for connection to the air supply and power source.

Floatrical augusts	Power supply	110-240 Vac/50-60 Hz				
Actuators	Supply fuse	5A (T)				
	Electric	24 Vac/50-60Hz				
	Pneumatic	4 to 6 bar g (58 to 87 bar g)				

Support frame

The whole system is delivered pre-assembled on a compact frame and baseplate, option of fitted wheels for ease of moving the unit into position, alternatively with a fork lift truck.

Dimensions (approximate) in mm (inches)

Heat load (kW)		Туре	Valve actuation	Maxin	num dimer	nsions	Piping connections DN					
Min.	Max.			н	L W		Steam	Water	Condensate			
50	550	EHHCC1	EL or PN	1321 (52.0)	1 281 (50.4)	684 (26.9)	DN50 (2")	DN50 (2")	DN15 (½")			
550	1500	EHHCC2	EL or PN	1414	1 420 (55.9)	834	DN100	DN100 (4")	DN20 or DN25			
1500	2500	ЕННСС3	EL or PN	(55.7)	1 706 (67.2)	(32.8)	(4")		(¾" or 1")			

Notes:

- 1. The height of the system will increase by 25 mm (0.98") if the wheels are fitted.
- 2. The heat load has been based on a steam inlet pressure of 2 bar g (29 psi g) and 0 bar backpressure.



Spirax EasiHeat™ HTG nomenclature

	Building heating unit	EHHCC = Spirax EasiHeat™ HTG condensate control	EHHCC			
		1 = DN15 (½")				
	Control valve size	2 = DN20 (¾")	2			
Compulsory selection		3 = DN25 (1")				
	Pressure vessel code	P = PED	Р			
	A -44!	EL4 = Electric	F1.4			
	Actuation	PN = Pneumatic	EL4			
	Llink limit	HL = Integrated high limit	1111			
	High limit	IHL = Independent high limit	- IHL			
	High limit actuation	B = Battery back-up				
	(EL only)	C = Super capacitor	— В			
Machaniaal antiona		V1 = Ball valve				
Mechanical options	Isolation	V2 = BSA	V2			
		V3 = DBB3				
	Gasket material	G1 = EPDMPC	G1			
	Fortune	W = Wheels	10/			
	Extras	S = EN 12828 safety option	– W			
	Control panel	T2 = SIMS technology touch screen	T2			
	Energy monitoring	E = With energy monitoring	E			
Panel options		R1 = Level 1 – SMS and E-mail				
	Remote access	R2 = Level 2 – Full web access	R2			
		R3 = Level 3 – SMS + Remote	_			
		C1 = Modbus RTU				
		C2 = BACnet MS/TP				
		C3 = Modbus TCP/IP				
Communications		C4 = DeviceNet C5 = CANopen				
		C6 = BACnet IP				
		C7 = Profibus				

Spirax EasiHeat™ HTG nomenclature example:

		ЕННСС	2	Р	EL4	-	IHL	В	V2	G1	w	_	T2	E	R2	C2
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Typical specification

The heating system shall be a Spirax EasiHeat™ compact heat transfer system complete with PLC functionality and SIMS technology to provide energy monitoring and remote access. The system will be pre-assembled and mounted on a compact frame with either pneumatic or electric control option.

In order to meet EU standards for Temperature Control Devices and Temperature Limiters For Heat Generating Systems, the selection of Independent High Limit (IHL) control is a compulsory selection for packages installed within the EU.

How to order

All systems are designed for the required heat load with controls to suit the application. The best way of ensuring that we have all the necessary information for quotation and manufacture is to complete our enquiry data sheet. Copies can be supplied on request and special requirements should be detailed.