ELWA

Preheater KVD/KVT

Efficient preheating with steam or thermal oil

Service Hotline

+ 49 (0) 8141 – 22866-980

ELWA

product data sheet KVD/KVT

Description

The series KVD/KVT heaters offer highly effective heating power for processes with water or similar media. The heat exchangers and the pumps can be perfectly adapted to the customer`s application.

Design
The KVD/KVT series is based on high quality shell and tube heat exchangers. With the mounted control cabinet and the integrated pumps we offer configurable units which can be used for many applications. We use high-quality centrifugal pumps. The tube bundles can be exchanged with standard tools.

Electrics
The units can be adapted to any operating voltage between 230 VAC and 690 VAC.

Operating pressure
10 bar

Operating temperature
Water: 95/100 °C/thermal oil: max. 190 °C/steam: max. 170 °C

Heat transfer
The heated medium (water) is pumped through the tubes of the heat exchanger while the heating medium – steam or thermal oil – flows through the shell.

Temperature control
The heating power is controlled with piston operated control valves (pressurized air). The pilot (solenoid) valve is controlled by the electronic temperature controller. The motor starter with stop delay, and the temperature controller with digital temperature display are integrated in the mounted control box.

Typical applications
The series KVD/KVT heaters are the perfect choice for preheating the cooling water circuits of large diesel engines. Further possible area of application: Heat source for industrial processes.

Safety
All units are equipped with a temperature safety cut-out. Additionally the flow of the heated medium through the heat exchanger is monitored with a minimum flow switch. In case of a pump failure or excess temperature, the control will shut of the flow off the heating medium.

Thermal insulation
The heaters come with an efficient thermal insulation made of rock wool and galvanised steel sheet cover.
For thermal insulation of the pipes, softshell insulations are available upon request.

Painting
Heavy duty industrial painting with 2K structured PUR paint

Process connections
Standard: Flanges according to DIN EN 1092-1/11B1/DN15-DN250/PN16

Classifications
ABS, BV, DNV, CCS, GL, LRS, RINA, MRS, others on request

Overview table

STEAM

		Cooling water		Steam	Connections (DN)		
Steam 50 Hz	**Heating (max)**	(m^3/h)	(mWC)	(kg/h)	CW	steam	cond
KVD8-27	27 kW	10	8,0	53	40	15	15
KVD8-48	48 kW	10	8,0	85	40	20	15
KVD8-72	72 kW	12,5	10,0	127	40	20	20
KVD8-110	110 kW	22	10,0	194	50	25	20
KVD8-150	150 kW	22	10,0	267	50	32	20
KVD8-210	210 kW	34	10,0	368	65	40	20
KVD8-270	270 kW	34	10,0	473	65	40	25

		Cooling water		Steam	Connections (DN)		
Steam 60 Hz	**Heating (max)**	(m^3/h)	(mWC)	(kg/h)	CW	steam	cond
KVD8-27	27 kW	15	10,0	53	40	15	15
KVD8-48	48 kW	15	10,0	85	40	20	15
KVD8-72	72 kW	15	10,0	127	40	20	20
KVD8-110	110 kW	20	11,8	194	50	25	20
KVD8-150	150 kW	20	11,8	267	50	32	20
KVD8-210	210 kW	35	11,7	368	65	40	20
KVD8-270	270 kW	35	11,7	473	65	40	25

THERMAL OIL

		Cooling water		Thermal oil	Connections (DN)	
Th. oil 50 Hz	**Heating (max)**	(m^3/h)	(mWC)	(l/h)	CW	Th.oil
KVT8-27	27 kW	10	8,0	1720	40	15
KVT8-48	48 kW	10	8,0	3000	40	20
KVT8-72	72 kW	12,5	10,0	4600	40	25
KVT8-110	110 kW	22	10,0	7000	50	32
KVT8-190	190 kW	34	10,0	12100	65	40
KVT8-270	270 kW	34	10,0	17200	65	50

		Cooling water		Thermal oil	Connections (DN)	
Th. oil 60 Hz	**Heating (max)**	(m^3/h)	(mWC)	(l/h)	CW	Th.oil
KVT8-27	27 kW	15	10,0	1720	40	15
KVT8-48	48 kW	15	10,0	3060	40	20
KVT8-72	72 kW	15	10,0	4600	40	25
KVT8-110	110 kW	20	11,8	7000	50	32
KVT8-190	190 kW	35	11,7	12100	65	40
KVT8-270	270 kW	35	11,7	17200	65	50

The table shows recommended pump data. Please note that we can use smaller/larger pumps on request.