



HR HS

High side
float regulators



WITT
TA WITT
Kältemittelhersteller-Bereich
D 12270 Käßau - Germany

00001261 CE 0035
HR 2-HN
Typ
HR 10/100 -125 bar
HR 10/100 -10+125 °C
PT 37.0 bar
Made in Germany

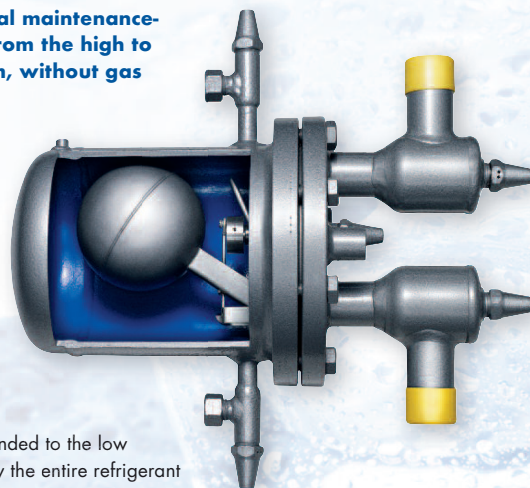
Herstellernummer: 2006
Anzahl der Ventile: 2
Nennleistung: 1.1370 kW
Nennleistung: 101.40 kW
Nennleistung: 04.05.2008
Nennleistung: 0.6.1



HR & HS

High side float regulator

The high side control offers a simple mechanical maintenance-free solution to expanding liquid refrigerant from the high to the low pressure side of a refrigeration system, without gas passing. From technical and economical point of view this is the optimum and safest way of expanding refrigerant and handling condensate return.



Reduction of filling capacity

With the WITT HR & HS condensate is continuously expanded to the low pressure side. That means during normal operation nearly the entire refrigerant charge is stored on the low pressure side, whereby a high pressure receiver is unnecessary.

Safety

Due to the mechanical design no wiring or additional controls are required. In the event of a power failure condensate is drained safely to the low pressure side, ensuring highest operational safety.

Energy-efficient

Since refrigerant is always drained by the float whenever condensate accumulates, lower condensing temperatures can be utilized without a need to consider other control criteria. Compared to a system operating with traditional expansion valves there is neither a need for sub-cooling liquid nor superheating the suction gas. (Remark: energy savings of up to 13% are quite possible, i.e. with 5 K lower condensation temperature).

Stable plant operation

Pressure fluctuations are avoided by continuous condensate drainage, guaranteeing stable operation of the whole system.

Reduction in maintenance cost

During downtimes of the refrigeration system there will be slow pressure equalization when using float regulators with low pressure nozzles. Systems with only one compressor can be started from an unloaded condition without need for additional controls.



WITT	capacity	total high incl. valves	diameter	depth	connections	weight
	[kW]	[mm]	[mm]	[mm]	[DN]	[kg]
HR1 BW	40*	310	200	365	25	10
HR1	95*	440	200	425	25	13
HR2	390*	480	250	445	32	23
HR3	1160*	640	345	555	50	54
HR4	3345*	910	406	765	80	135
HS30	1045*	510	290	655	100/50	49
HS40	2815*	685	400	775	150/80	107
HS50	4745*	855	406	765	200/80	135
WP2HR	260**	460	250	475	32	26
WP3HR-65	860**	545	355	650	50	68

* Refrigerant: NH₃, T₀ = -10°C, T_c = +35°C ** Refrigerant: NH₃, T₀ = +35°C, T_c = +75°C

Technical data

HR1- HR4, HS50 and HR1BW

Max. allowable pressure PS:
25 bar between +75/-10°C
18,75 bar between -10/-60°C
Test pressure PT:
37 bar oil pressure

WP2HR

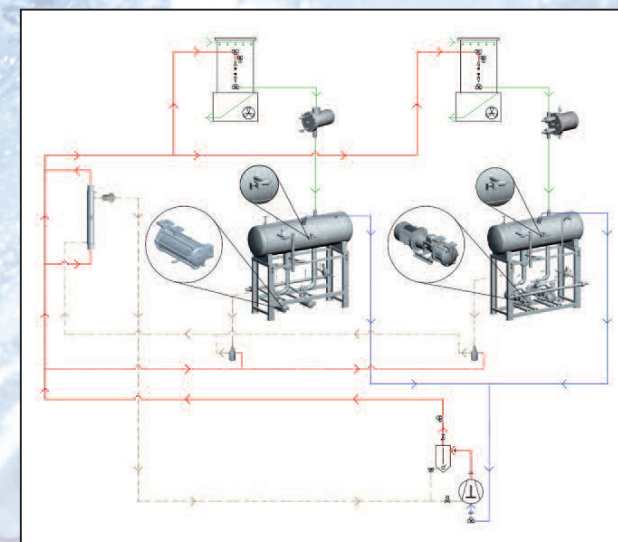
Max. allowable pressure PS:
40 bar between +90/-10°C
30 bar between -10/-60°C
Test pressure PT:
59 bar oil pressure

WP3HR

Max. allowable pressure PS:
65 bar between +100/-10°C
48,75 bar between -10/-60°C
Test pressure PT:
100 bar oil pressure

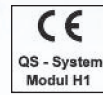
HS30- HS40

Max. allowable pressure PS:
40 bar between +75/-10°C
30 bar between -10/-60°C
Test pressure PT:
59 bar oil pressure



High-quality refrigeration components

- **HRP** Hermetic refrigerant pumps
- **GP** Open refrigerant pumps
- **HR & HS** High side float regulators
- **WP3HR** High side float regulators for heat pumps up to 65 bar
- **ECO** Economizer
- **BDP** Automatic oil recovery
- **NGX** Maximum level switch
- **HDB 3** Stainless steel oil drain vessel
- **HAD** High efficient separator
- Pumping stations
- **SAV** Standard-separator-evaporator-unit
- **DB** Pressure vessel units
- **NH₃/CO₂** Cascades



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