



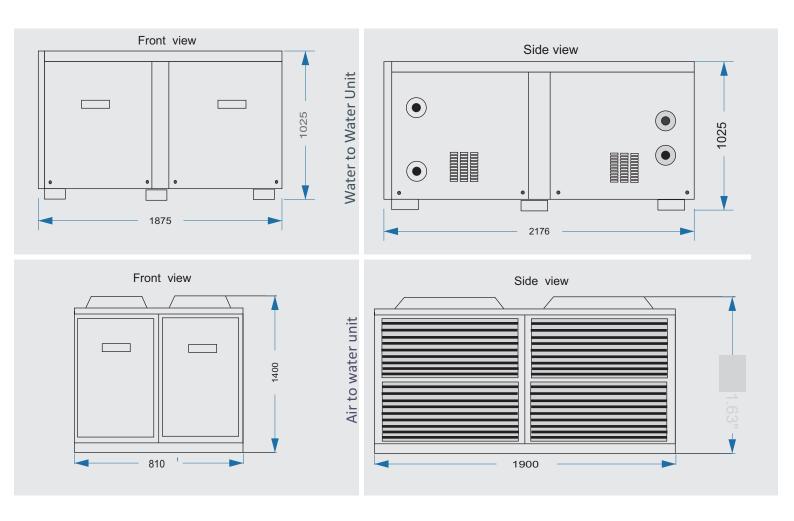
Produce by THERMEX SOLUTIONS
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## **INVERTER Compressor in Heat Pump**

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Inverter compressors are the best way to obtain and exceed the energy standards with high part-load and seasonal efficiency while providing several other key benefits. On top of the advantages provided by the technology (precise cooling and humidity management, low start-up current, energy efficiency etc.), Danfoss inverter scrolls VZH have specific features that offer high value to the customers and end users.



## **DOUBLE WALL** heat exchanger inside



Advantages of the Double-Wall Plate Heat Exchanger The Double Wall Plate Heat Exchanger, has many ad -vantages over double-wall shell-and-tube heat exchangers:compact,Diagram Transformer oil cooling Water-contaminating

transformer oil can result in severe damage to the transformer and can necessitate lengthy plant shutdowns. Lube oil cooling Oil which pollutes the cooling medium, whether it is sea, lake or river water, can cause severe damage to the environment and if the cooling medium mixes with the oil, serious damage can be caused to the equipment being cooled. Quench oil cooling Water mixing with quench oil can cause a steam explosion. Potable water heating District heating water, glycol, refrigerants and other heat sources

	TER HEATER	TH150A3-DW-V	TH150W3-DW-V	TH60A3-S695AW
System type	Heat pump	Air sourced	Water sourced	Air sourced
Heating Capacity	TR		30	16
At 65% RH – air sourced	kW	155		80
At chiller water 12/07 – water	kW		155 @ 4500 rpm	
Max Temperature output	С		60	60
Capacity control	%	12.5% to 100%		
Refrigerant	Туре	R410a		R410a
Total power input max	kW	31.4	38.2	15.7
Total running current	Amps	49.2	57.6	24.6
Unit COP – 10C ambient 30% RH	·	3.7 @ 4740rpm	3.9 @ 4600rpm	3.7 @ 4740rpm
Unit COP – 15C Ambient 40% RH		4.3 @ 4130 rpm	4.5 @ 4530 rpm	4.3 @ 4130 rpm
Unit COP – 20C ambient 50% RH		4.9 @ 3500 rpm	5.1 @ 3600 rpm	4.9 @ 3500 rpm
Unit COP – 25C ambient 60% RH		5.6 @ 2000 rpm	5.6 @ 2100 rpm	5.6 @ 2000 rpm
@Power requirements	V/Hz/Ph	380-415/50/3		380-415/50/3
COMPRESSOR	Danfoss	Scroll Hermetic – DC Inverter motor		1
Motor size	HP	15	15	15
RPM	Rpm – max	5000		
QTY		2	2	1
Maximum Power input	kW	14.5 each	19.1 each	14.5 each
Total running current	Amps	22.2 each	28.8 each	22.2 each
Rated load current / comp	Amps	61.0	61.0	61.0
Locked rotor amps	Amps	N/A		02.0
Compressor COP – fill load	7111105	5.2	3.95	5.2
Oil charge / comp	L	1.8	1.8	1.8
Oil type		1.0	POE	POE
CONDENSER			100	102
Material	Stainless steel	plate heat exchanger -	– Double wall	
EVAPORATOR FANS	-	place fleat exchanger	Bodbic Wall	
Fan speed	Rpm	2900	N/A	2900
Fan diameter	mm	630	N/A	630
No fans		4	N/A	2
Total power input	kW	2.4	N/A	1.2
Total running current	Amps	4.8	N/A	2.4
Total air flow	M3/ hr	28000	N/A	15000
Evaporator flow rate	I/s	20000	5.5	13000
CONDENSER	Stainless steel	plate heat exchanger - stainless steel heat excl		
No. refrigeration circuits	2 vaporator :	2		2
Hot water flow rate	I/s	7.2		7.2
Pressure drop	kPa	55		55
nlet / outlet CHW Temperature	С	45/50 condenser		45/50 condenser
Working temperature range	С	-5/45		-5/45
Water connections	mm	2.5" FBSP		2" FBSP
Condenser protection	111111	Flow switch		Flow switch
CONTROLLER	PLC	LIOM 2MILCII		TIOW SWILCH
HP Safety	3200kPa	LP Safety	375kPA	275104
Shipping weight - dry	Kg	850	800	375kPA 280/300

 $\label{thm:continuous} The \ above \ information \ may \ vary \ from \ production \ without \ prior \ notice \ in \ advance$ 

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