

Howden WRV 204/16536 Capacities

-10/+40

0101/0051		28-02-04	
HOWDEN WRU 204-16536 on NH3 at 2945 rpm			
----- INPUT -----			
Evap. temp	-10°C	Suct. temp	-8°C
Evap. press	2.91 bar.a	Suct. press	2.81 bar.a
Cond. temp	40°C	Useful s'ht	1 °C
Cond. press	15.5 bar.a	Suct. loss	.1 bar
		Subcooling	0 °C
		Disch. loss	.05 bar
----- FULL LOAD -----			
Type	WRU	Type	WRU
Evap. Cap. (kW)	711	Cond. Cap. (kW)	805
Abs. Power (kW)	215	Abs. Torque (Nm)	698
Suct. Flow (kg/h)	2410	Oil Flow (l/s)	2.64
Oil/Gas dP (bar)	2.07	Oil Pump (l/s)	3.42
Oil Temp (°C)	45	Disch. Temp. (°C)	73.3
Oil Cooler (kW)	123		
----- MINIMUM LOAD -----			
Oil Temp (°C)	45	Disch. Temp. (°C)	79
Oil Cooler (kW)	109	Oil Flow (l/s)	1.94

-20/+40

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HOWDEN WRU 204-16536 on NH3 at 2945 rpm			
----- INPUT -----			
Evap. temp	-20°C	Suct. temp	-18°C
Evap. press	1.9 bar.a	Suct. press	1.8 bar.a
Cond. temp	40°C	Useful s'ht	1 °C
Cond. press	15.5 bar.a	Suct. loss	.1 bar
		Subcooling	0 °C
		Disch. loss	.05 bar
----- FULL LOAD -----			
Type	WRU	Type	WRU
Evap. Cap. (kW)	449	Cond. Cap. (kW)	516
Abs. Power (kW)	199	Abs. Torque (Nm)	647
Suct. Flow (kg/h)	1540	Oil Flow (l/s)	2.77
Oil/Gas dP (bar)	2.07	Oil Pump (l/s)	3.58
Oil Temp (°C)	45	Disch. Temp. (°C)	74.3
Oil Cooler (kW)	134		
----- MINIMUM LOAD -----			
Oil Temp (°C)	45	Disch. Temp. (°C)	80
Oil Cooler (kW)	119	Oil Flow (l/s)	2.04

-30/+40

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HOWDEN WRU 204-16536 on NH3 at 2945 rpm

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**INPUT**

Evap.temp -30°C	Suct.temp -28°C	Useful s'ht 1 °C
Evap.press 1.19 bar.a	Suct.press 1.09 bar.a	Suct.loss .1 bar
Cond.temp 40°C		Subcooling 0 °C
Cond.press 15.5 bar.a	Disch.press 15.6 bar.a	Disch.loss .05 bar

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**FULL LOAD**

Type	WRU	Type	WRU
Evap.Cap.(kW)	263	Cond.Cap.(kW)	308
Abs.Power(kW)	188	Abs.Torque(Nm)	611
Suct.Flow(kg/h)	917	Oil Flow(1/s)	2.86
Oil/Gas dP(bar)	2.07	Oil Pump(1/s)	3.7
Oil Temp(°C)	45	Disch.Temp.(°C)	75.7
Oil Cooler(kW)	145		

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**MINIMUM LOAD**

Oil Temp(°C)	45	Disch.Temp.(°C)	81
Oil Cooler(kW)	126	Oil Flow(1/s)	2.11

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-40/+40

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HOWDEN WRU 204-16536 on NH3 at 2945 rpm

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**INPUT**

Evap.temp -40°C	Suct.temp -38°C	Useful s'ht 1 °C
Evap.press .718 bar.a	Suct.press .618 bar.a	Suct.loss .1 bar
Cond.temp 40°C		Subcooling 0 °C
Cond.press 15.5 bar.a	Disch.press 15.6 bar.a	Disch.loss .05 bar

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**FULL LOAD**

Type	WRU	Type	WRU
Evap.Cap.(kW)	135	Cond.Cap.(kW)	161
Abs.Power(kW)	180	Abs.Torque(Nm)	584
Suct.Flow(kg/h)	478	Oil Flow(1/s)	2.92
Oil/Gas dP(bar)	2.07	Oil Pump(1/s)	3.77
Oil Temp(°C)	45	Disch.Temp.(°C)	77.1
Oil Cooler(kW)	155		

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**MINIMUM LOAD**

Oil Temp(°C)	45	Disch.Temp.(°C)	82
Oil Cooler(kW)	132	Oil Flow(1/s)	2.16

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