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**GACO SARL**

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25000 BELLEVUE/CONSTANTINE - ALGERIE

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## Project Report

Refrigerant R404A Dew Point

**High Side Properties:**

|                                              |        |
|----------------------------------------------|--------|
| Condensing Temperature °C                    | 52.00  |
| Condensing Abs. Pressure bar a               | 24.05  |
| Dew Point °C                                 | 52.00  |
| Bubble Point °C                              | 51.71  |
| Saturated vapour enthalpy kJ/kg              | 381.49 |
| Specific volume of saturated vapour cu.dm/kg | 6.84   |
| Liquid Temperature °C                        | 51.71  |
| Liquid enthalpy kJ/kg                        | 280.53 |

**Low Side Properties:**

|                                 |        |
|---------------------------------|--------|
| Evaporating Temperature °C      | -25.00 |
| Evaporating Abs. Pressure bar a | 2.50   |
| Dew Point °C                    | -25.00 |
| Bubble Point °C                 | -25.67 |
| With vapour at °C               | -15.00 |
| Specific volume cu.dm/kg        | 81.63  |
| Enthalpy kJ/kg                  | 360.46 |

**Operating Conditions:**

|                            |        |
|----------------------------|--------|
| Evaporating Temperature °C | -25.00 |
| Condensing Temperature °C  | 52.00  |
| Suction Superheat K        | 10.00  |
| Subcooling K               | 0.00   |

Compressor Selected D3DS-150X

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**PERFORMANCE AT SPECIFIED OPERATING POINT**  
**D3DS-150X Data at 50Hz**

|                     |        |
|---------------------|--------|
| Cooling Capacity kW | 9.97   |
| Power kW            | 8.90   |
| COP                 | 1.12   |
| Current at 400V, A  | 16.73  |
| Mass Flow g/s       | 125.00 |
| Heat Rejection kW   | 18.45  |
| Isentropic Eff. %   | 67.38  |

**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

|                               |                  |
|-------------------------------|------------------|
| Number of cylinders           | 3                |
| Displacement @ 50 Hz, cu.m/h  | 49.9             |
| Bore/Stroke, mm               | 61.9/63.5        |
| Length/Width, mm              | 710/370          |
| Height, mm                    | 490              |
| Net Weight, kg                | 166              |
| Gross Weight, kg              | 178              |
| Rotalock Discharge, inch      | 1 1/8            |
| Suction, inch                 | 1 5/8            |
| Oil Quantity, l               | 3.7              |
| Base mounting (hole dia), mm  | 381 x 305 (18.0) |
| Sound Pressure @ 1m (MT), dBA | 71               |
| Sound Pressure @ 1m (HT), dBA | 71               |
| Sound Power (MT), dBA         | 82               |
| Sound Power (HT), dBA         | 82               |
| High Side PS, bar(g)          | 32.5             |
| Low Side PS, bar(g)           | 22.5             |

**COMPRESSOR ELECTRICAL DATA (380/420V - 3~ - 50Hz)**

|                              |                |
|------------------------------|----------------|
| Maximum Operating Current, A | 29             |
| Locked Rotor Current, A      | 123            |
| Default Enclosure Class      | IP 54 (IEC 34) |

**ACCESSORIES INCLUDED**

|                     |             |
|---------------------|-------------|
| Oil Pressure Switch | OPS2 Sensor |
| Mounting Springs    | 4           |

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***ACCESSORIES OPTIONAL***

Additional Cooling  
Capacity Control  
Crankcase Heater  
Enclosure Class  
Oil Pressure Switch  
Unloaded start  
Deep Oil Sump  
Adapter Kit  
Check Valve  
Oil Control System  
Inverter

70W Vertical Air Flow Fan  
Moduload  
70W Internal  
IP 56  
OPS2 Electronic Switch  
Available  
Mounted  
For Parallel Operation  
For unloaded start operation  
ALCO Trax-Oil OM3  
Emerson Industrial Automation,  
Unidrive M200 06 400 350

D3DS 150X, D3DS 1500

