## INSTRUMENT AIR

| ITEM | SERVICE | FLUID (PHASE) | PIPING SIZE | FLOW (Nm3/h) Cont. / Design | TEMPERATURE (°C) | | | | PRESSURE (barg) | | | | DURATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | MIN. | NORM. | MAX. | DESIGN | MIN. | NORM. | MAX. | DESIGN | |
| REFRIGERATION PACKAGE<br>RU0001 A/B | VALVES | INSTRUMENT AIR (GAS) | 1/2" | 1.8 / - | 5 | AMB. | 50 | 85 | 6.5 | 7 | 7.5 | 10.5 | CONTINUOUS |

NOTES:

1) Air Consumption for Control Valves= 0.9 Nm3/h Per Valve.

GENARL NOTES:

1) Utility consumption data are considered for whole package.

**DEFINITIONS:**

COLUMN POWER SUPPLY :

"STATUS SUPPLY" INDICATES TYPE OF POWER SUPPLY

N : NORMAL
E : EMERGENCY
U : UPS LOADS

COLUMN RATED POWER (KW)

RATED POWER SHALL BE CONSIDERED MECHANICAL POWER WITH API FACTOR CONSIDERATION AND
NORMALIZATION TO STANDARD RATING POWERS (REFER TO IEC60072-1)

COLUMN EFFICIENCY (%) :

EFFICIENCY FACTOR AT NORMAL LOAD

COLUMN POWER FACTOR (%) :

POWER FACTOR AT NORMAL LOAD

| REV. | ITEM | TAG NO. | Description | Quantity Total | Quantity | | | Rated Power (KW) | Normal Power (KW) | Rated Voltage | Efficiency (%) | Power Factor | 3 phase / 1 phase | Power Supply | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Continuous | Intermittent | Standby | | | | | | | N/E/U | |
| 0 | 1 | 70-UCP-RU7001A/B | Unit Control Panel | 1 | x | - | - | 2.500 | 2.500 | 110 VAC | 100 | 0.97 | 1 phase | U | |
| 0 | 2 | 70-UCP-RU7001A/B | Unit Control Panel | 1 | x | - | - | 1.000 | 1.000 | 220 VAC | 100 | 0.97 | 1 phase | N | |
| | | | | | | | | | | | | | | | |
| 0 | 3 | RU0001A-M-01 | Main Motor | 1 | x | - | - | 120 | 120 | 400 VAC | 95.4 | 0.91 | 3 phase | N | |
| 0 | 4 | RU0001B-M-01 | Main Motor | 1 | x | - | - | 120 | 120 | 400 VAC | 95.4 | 0.91 | 3 phase | N | |
| 0 | 5 | RU0001A-MSH-01 | Main Motor Space Heater | 1 | - | x | - | 0.109 | 0.109 | 230AC | 100 | 1.00 | 1 phase | N | |
| 0 | 6 | RU0001B-MSH-01 | Main Motor Space Heater | 1 | - | x | - | 0.109 | 0.109 | 230AC | 100 | 1.00 | 1 phase | N | |
| | | | | | | | | | | | | | | | |
| 0 | 7 | RU0001A-M-04 | AUX Motor | 1 | x | - | - | 2.5 | 2.5 | 400VAC | 87.7 | 0.8 | 3 phase | N | |
| 0 | 8 | B-M-04 | AUX Motor | 1 | x | - | - | 2.5 | 2.5 | 400VAC | 87.7 | 0.8 | 3 phase | N | |
| | | | | | | | | | | | | | | | |
| 0 | 9 | RU0001A-H-01 | Oil Heater | 1 | x | - | - | 2 | 2 | 400VAC | 100 | 1 | 3 phase | N | |
| 0 | 10 | RU0001B-H-01 | Oil Heater | 1 | x | - | - | 2 | 2 | 400VAC | 100 | 1 | 3 phase | N | |

| ITEM | REV. | TAG NO. | Description | Load Type | Load Statude | Operating Type | Voltage Type | Voltage (V) | Frequency (Hz) | Mechanical Absorbed Power (KW) | Rotor Shaft Power @Min Temp | API 661 Factor (part: 7.2.7.1.2 | Absorbed Power (KW) (see note 1) | EFF. | P.F. | Operating Power(Kw | Rated Power | rated Current | Density Factor | Starting Method |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | RU0001A-M-03 | Air cooler MOTOR LOAD LV-400V | M | C | N | 3 PH | 400±5% | 50±2% | 4.5 | 5.3 | 1.05 | 4.97 | 0.9 | 0.84 | 6.9 | 7.5 | 14.43 | 1 | VFD |
| 2 | 0 | RU0001A-M-02 | Air cooler MOTOR LOAD LV-400V | M | C | N | 3 PH | 400±5% | 50±2% | 4.5 | 5.3 | 1.05 | 4.97 | 0.9 | 0.84 | 6.9 | 7.5 | 14.43 | 1 | DOL |
| 3 | 0 | RU0001B-M-03 | Air cooler MOTOR LOAD LV-400V | M | C | N | 3 PH | 400±5% | 50±2% | 4.5 | 5.3 | 1.05 | 4.97 | 0.9 | 0.84 | 6.9 | 7.5 | 14.43 | 1 | VFD |
| 4 | 0 | RU0001B-M-02 | Air cooler MOTOR LOAD LV-400V | M | C | N | 3 PH | 400±5% | 50±2% | 4.5 | 5.3 | 1.05 | 4.97 | 0.9 | 0.84 | 6.9 | 7.5 | 14.43 | 1 | DOL |

C: Countinus Operation
CS: Countinus Standby
IO: Intermitant Operation
SD: Shutdown operation
SU: Start Up operation

N: Normal Load
E:Emergency Load
DOL: Direct on Line Staring
VFD: Variable Frequency Drive