



TECHNICAL DATA SHEET

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|------------|-----------------|
| Bulletin | : BAA: D0004_16 |
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COMPACT DEHUMIDIFIER FLUTED FLAT BED - FFB SERIES

FFB WITH HIGH PERFORMANCE, **EGG DRY** METAL SILICATE FLUTED
 DESICCANT SYNTHESISED ROTOR

FEATURE HIGHLIGHTS

High efficiency and reliability

- * **CE** Certified as per standard EN 60204-1:2018/IEC 60204-1:2016, EN ISO 12100:2010, IEC 60335-2-40:2018, EN 61000-6-2:2019, EN 61000-6-4:2019, EN 55011:2016, IEC 61000-4-2:2008, IEC 61000-4-4:2012, IEC 61000-4-5: 2014 + AMD1:2017, IEC 61000-4-6:2013,
- * Low Voltage Directive (2014/35/EU) Machinery Directive (2006/42/EC) & EMC Directive (2014/30/EU)
- * A totally self contained unit
- * CNC fabricated unit(s) with powder coated finish
- * Rotor media has high performance metal silicates synthesized in situ.
- * Rotor incorporates robust internal structure with stainless steel perimeter flange for industrial quality, durability and easy serviceability.
- * Rotor perimeter flange extends media and seal life
- * Edge hard face coating on rotor ensures long life and good sealing for media and seals.
- * Rotor is non-flammable with organics < 2%.
- * Process and reactivation air flow sectors are insulated

Necessary control and safeties

- * Micro processor controller
- * MODBUS Communication via RS 485 Serial
- * Remote start /stop option
- * Auto / manual mode selection
- * Independent differential air pressure switch for providing react air flow.
- * Independent reactivation cool down safety device.
- * Electrical interlocking of fan motors, heaters and rotor drive.
- * Unique PTFE bonded bulb seal design; minimized air leakage

Easy to operate

- * Suitable for continuous operation
- * Independent blower and motor for each airflow (Process & Reactivation)
- * Volume control damper for both (Process & Reactivation) air flow

Easy to install

- * Several mounting and installation options
- * Small footprints; low volume/weight per CMH.

Easy to maintain

- * Quick and easy to service
- * Rotor is water washable

Options

- * Humidity control through humidistat on/off
- * Stainless steel construction
- * Add on Pre/Post coil box

COMPACT DEHUMIDIFIER - FFB... SPECIFICATION

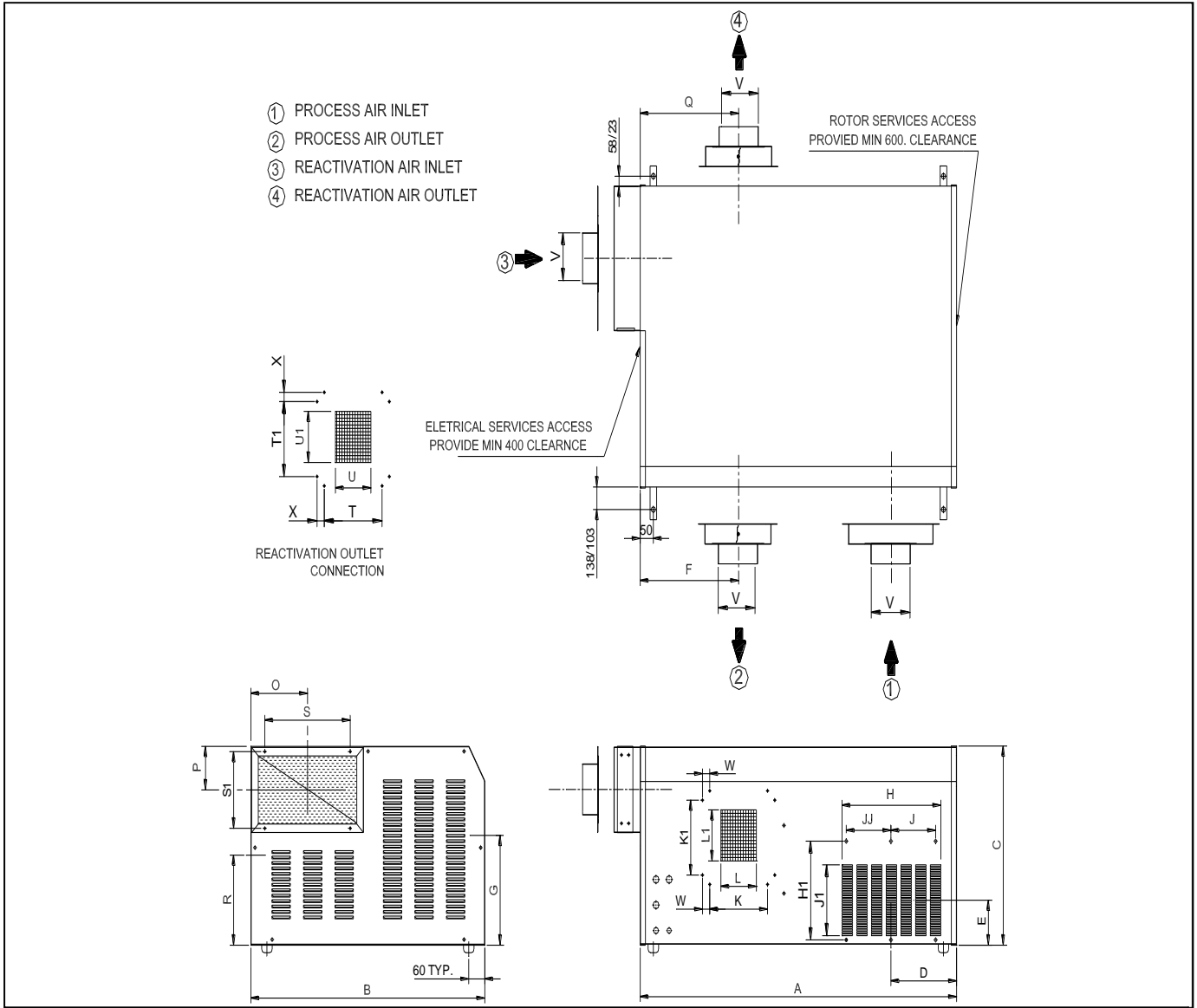
| MODEL | PROCESS AIR FLOW CMH | PROCESS ESP (Pa.) | PROCESS MOTOR KW | REACT. AIR FLOW CMH | REACT. ESP (Pa.) | REACT. MOTOR KW | REACT. HEATER KW | POWER * REQD. (v/Ø/Hz.) | APPROX. WEIGHT Kg. |
|---------|----------------------|-------------------|------------------|---------------------|------------------|-----------------|------------------|-------------------------|--------------------|
| FFB170 | 170 | 120 | 0.1 | 57 | 100 | 0.1 | 2.3 | 230 /1/ 50 | 66 |
| FFB300 | 300 | 200 | 0.1 | 100 | 100 | 0.1 | 3.6 | 230 /1/ 50 | 74 |
| FFB600 | 600 | 200 | 0.37 | 200 | 150 | 0.37 | 7.2 | 415 /3/ 50 | 109 |
| FFB1000 | 1000 | 200 | 0.75 | 333 | 150 | 0.75 | 12 | 415 /3/ 50 | 147 |
| FFB1500 | 1500 | 250 | 1.5 | 500 | 150 | 0.75 | 18 | 415 /3/ 50 | 191 |
| FFB2000 | 2000 | 250 | 1.5 | 667 | 150 | 0.75 | 24 | 415 /3/ 50 | 202 |
| FFB3000 | 3000 | 250 | 2.2 | 1000 | 150 | 1.1 | 31.5 | 415 /3/ 50 | 235 |
| FFB4500 | 4500 | 320 | 2.2 | 1400 | 249 | 1.1 | 42 | 415 /3/ 50 | 362 |

* Note:- Other voltage available are 200/220/240/380/440/460 VAC, 1Ph/3Ph, 50/60 Hz

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DIMENSIONAL DATA & DUCT CONNECTION (mm)



* Process Inlet size 500 x 210 for FFB-3000 only.

* Process Inlet size 528 x 218 for FFB-4500 only.

| MODEL | UNIT DIMENSION DATA (mm) | | | PROCESS DUCT CONNECTION (mm) | | | | | | | | | | | | | | REACTIVATION DUCT CONNECTION (mm) | | | | | | | | | | DIA. HOSE | | |
|----------|--------------------------|------|-----|------------------------------|-----|-----|-----|-----|-----|-----|-------------------|-----|-----|-----|-----|-----|------|-----------------------------------|-----|-----|-----|-----|-------------------|-----|-----|-----|-----|-----------|-----|-----|
| | | | | INLET CONNECTION | | | | | | | OUTLET CONNECTION | | | | | | | INLET CONNECTION | | | | | OUTLET CONNECTION | | | | | | | |
| | | | | A | B | C | D | E | H | H1 | J | JJ | J1 | F | G | K | K1 | L | L1 | w | O | P | S | S1 | Q | R | T | T1 | U | U1 |
| FFB-170 | 680 | 480 | 394 | 140 | 110 | 152 | 190 | 112 | 0 | 124 | 224 | 220 | 120 | 175 | 77 | 93 | 0 | 110 | 85 | 118 | 143 | 224 | 178 | 120 | 175 | 77 | 93 | 0 | 96 | 96 |
| FFB-300 | 740 | 540 | 445 | 170 | 110 | 208 | 190 | 170 | 0 | 124 | 237 | 265 | 120 | 175 | 95 | 93 | 0 | 110 | 85 | 118 | 143 | 237 | 170 | 120 | 175 | 95 | 93 | 0 | 96 | 96 |
| FFB-600 | 890 | 630 | 494 | 196 | 136 | 264 | 240 | 226 | 0 | 160 | 300 | 273 | 170 | 225 | 98 | 128 | 0 | 142 | 85 | 182 | 145 | 300 | 220 | 170 | 225 | 98 | 128 | 0 | 146 | 146 |
| FFB-1000 | 1048 | 730 | 555 | 225 | 160 | 320 | 290 | 280 | 0 | 208 | 365 | 290 | 220 | 220 | 124 | 150 | 27.5 | 180 | 125 | 255 | 225 | 365 | 270 | 220 | 220 | 124 | 150 | 27.5 | 196 | 196 |
| FFB-1500 | 1208 | 890 | 584 | 254 | 160 | 376 | 290 | 170 | 170 | 200 | 375 | 312 | 220 | 220 | 135 | 150 | 27.5 | 212 | 125 | 325 | 225 | 375 | 265 | 220 | 220 | 135 | 150 | 27.5 | 196 | 196 |
| FFB-2000 | 1208 | 890 | 629 | 250 | 160 | 376 | 290 | 170 | 170 | 200 | 375 | 344 | 220 | 220 | 135 | 163 | 27.5 | 212 | 125 | 325 | 225 | 375 | 255 | 220 | 220 | 135 | 150 | 27.5 | 196 | 196 |
| FFB-3000 | 1208 | 1000 | 730 | 302 | 160 | 500 | 290 | 230 | 230 | 210 | 390 | 420 | 295 | 295 | 155 | 205 | 27.5 | 212 | 125 | 325 | 225 | 375 | 265 | 220 | 220 | 135 | 150 | 27.5 | --- | 196 |
| FFB-4500 | 1227 | 1156 | 830 | 341 | 134 | 578 | 290 | 269 | 269 | 210 | 418 | 477 | 255 | 461 | 155 | 405 | -- | 218 | 129 | 325 | 225 | 402 | 261 | 220 | 220 | 137 | 150 | 27.5 | --- | 196 |

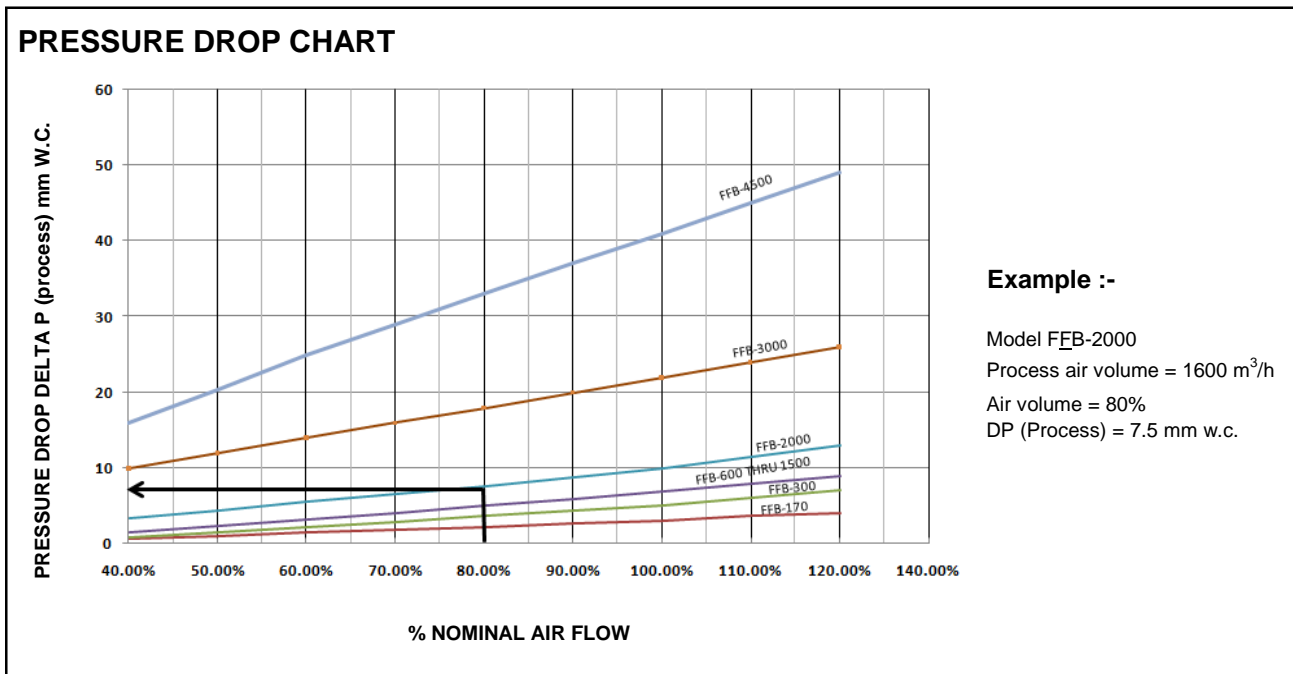
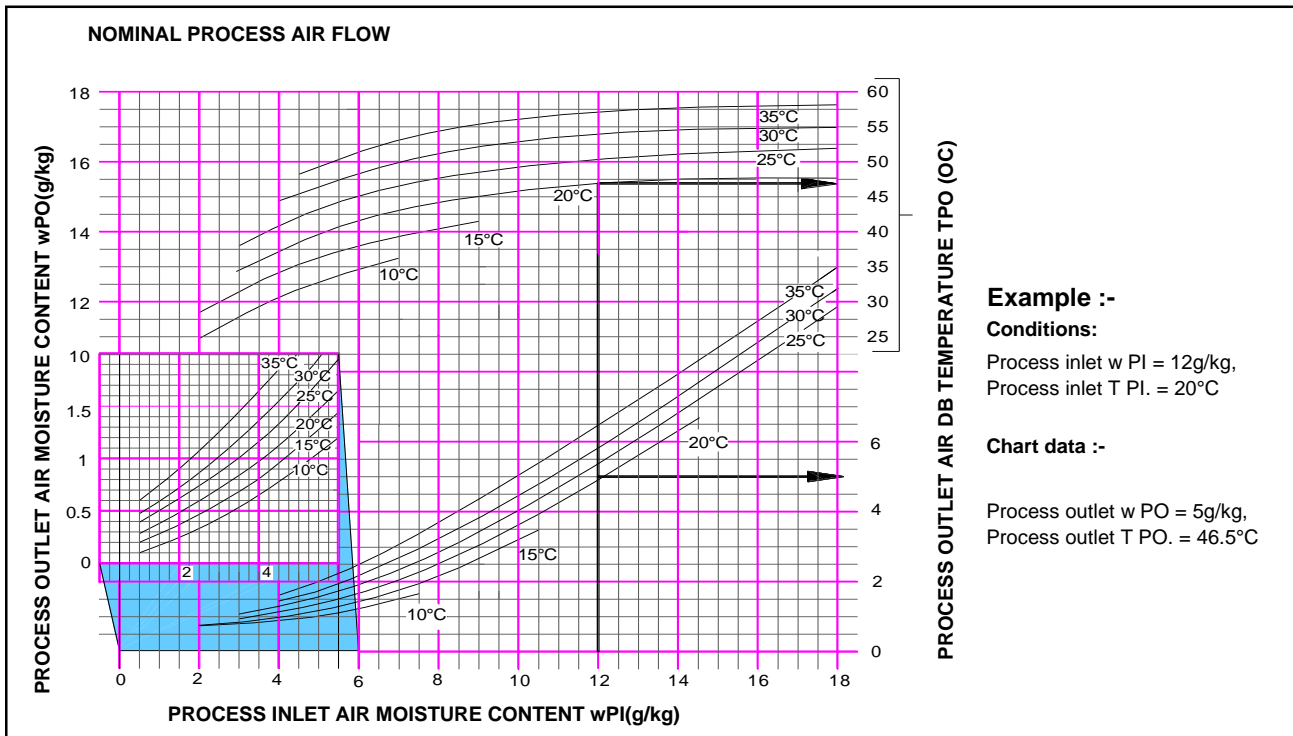
Note : (1) All dimensions in mm.

(2) For reference purpose only



PERFORMANCE CHART

Performance charts are for nominal process airflow within the operating range each FFB series and assumes $w_{PI} = w_{RI}$. Please consult Bry-Air for other specific condition.

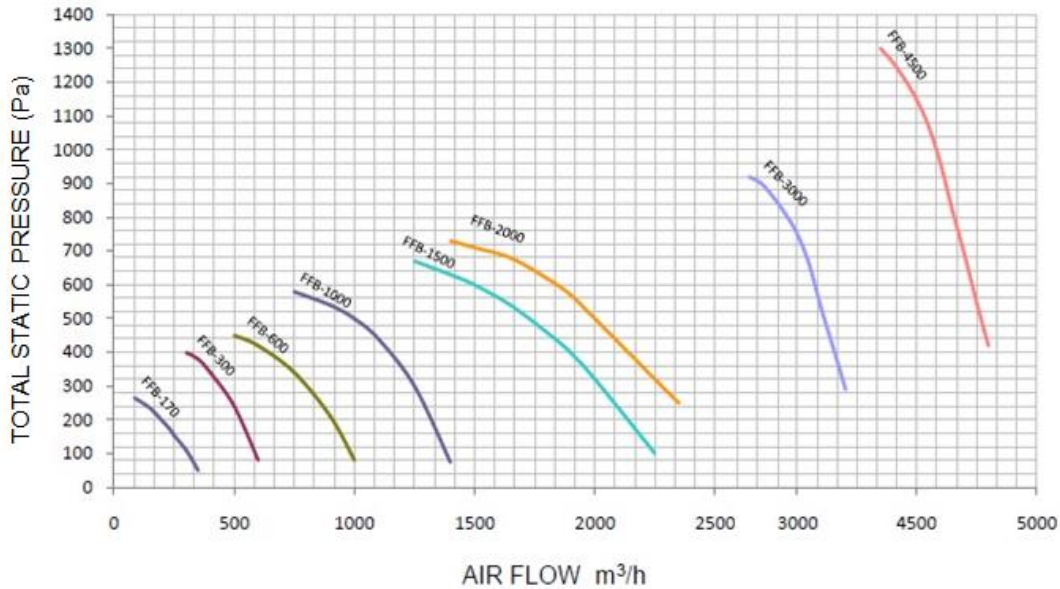


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FAN PERFORMANCE CURVE FFB-SERIES

The fan performance curve are for inlet conditions at 20°C, density 1.2kg/m³



FEATURE OVERVIEW

| | Items | Standard | Optional |
|-----------------------|---|----------|----------|
| Rotor : | High performance metal silicate | √ | |
| | High performance metal silicate (High RH) | | √ |
| | High performance molecular sieve (Low RH) | | √ |
| Process : | High capacity metallic mesh filter | √ | |
| | External box fitted with EU5 / filter | | √ |
| | External box fitted with EU7 / filter | | √ |
| | Higher static fan | | √ |
| Reactivation : | High capacity metallic mesh filter | √ | |
| | External box fitted with EU5 / filter | | √ |
| | External box fitted with EU7 / filter | | √ |
| | Higher static fan | | √ |
| Energy : | Electric reactivation | √ | |
| | External box fitted with steam reactivation | | √ |
| Construction : | Cold rolled powder coated steel | √ | |
| | Stainless steel | | √ |
| Control : | Single stage On/Off humidstat | √ | |
| | SSR control for reactivation heaters | √* | |
| | Digital display panel | | √ |
| | Microprocessor control | √ | |
| | Touch panel | | √ |

* STANDARD FOR FFB-4500 ONLY

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