

# Eaton DX-RT

## 10kVA/10kW 3x1 (XL Model) UPS

Manufacturer's declaration in accordance with IEC 62040-3



### Value Proposition:

#### High Performance

- kVA=kW.
- Rack and Tower Convertible
- Form Factor 2U with <600 mm Depth
- True Input PF 0.99
- True output Unity PF 1.
- Input THDi 3%.
- Output THDv 1%.
- Higher Power Density.
- Higher Efficiency upto 95%.
- Support Critical Virtualization.

#### High Reliability and Adaptability

- Wide Input Voltage Range
- Inbuilt Hardware Current Limit Technology.
- Upgraded Phase Lock Algorithm
- Inbuilt Over-voltage Cut-off Device
- Inbuilt Over Temperature Protection.
- Upto 50 Degree Celsius operation @50% Load (Specific to XL Model)
- Better Overload Protection upto 105% Constant

#### High Flexibility and Availability

- Adjustable Battery Voltage 192 Vdc-240 Vdc.
- Adjustable Charging Current 0 A-12 Amps
- Parallel Operation upto 3 UPS's.
- Better Short Ckt Handling Capacity.
- Auto Fault Recovery.
- Inbuilt Maintenance Bypass Switch.
- Conformal Coated Boards.
- PDU and MBS 2-in-1 kit support easy maintenance.
- More Accessories.

|                                          |                                                           |
|------------------------------------------|-----------------------------------------------------------|
| Model Name                               | DXRT 10KS-IN 3:1                                          |
| Catalog Name                             | DXRT10KS31-IN                                             |
| Plant Part Number                        | 9105-32580IN1                                             |
| <b>INPUT</b>                             |                                                           |
| -Acceptable Input Voltage                | 380/400/415V                                              |
| -Phase                                   | Three phase with ground                                   |
| -Input voltage range @ 100% and 50% load | 160V~276V full load<br>100V~160V Linear derating          |
| -Inrush Current Limit                    | 8*Irms                                                    |
| -Input Power Factor                      | ≥0.95                                                     |
| -Input Frequency Range                   | 45-55Hz / 54-66Hz (extendable to 40~70HZ when load < 60%) |
| -Input protection                        | upstream breaker                                          |
| -Generator Set                           | 1.5 x UPS Rating Power                                    |
| <b>OUTPUT</b>                            |                                                           |
| -Power(VA) max                           | 10000                                                     |
| -Power(W) max                            | 10000                                                     |
| -Power Factor                            | 1.0                                                       |
| -Waveform                                | Pure sine wave                                            |
| -Nominal voltage                         | 208V/220V/230V/240V                                       |
| -Voltage Variation                       | ± 1 %                                                     |
| -Voltage distortion                      | < 1% THD@ linear load                                     |
|                                          | <5% @non-linear load                                      |
| <b>Output Frequency</b>                  |                                                           |
| -Synchronization range                   | 45-55Hz / 54-66Hz (extendable to 40~70HZ when load < 60%) |
| -Slew rate                               | 1 Hz/s                                                    |
| - Battery mode                           | (50/60±0.1) Hz                                            |
| <b>Transfer Time</b>                     |                                                           |
| -Inverter Mode <--> Battery Mode         | 0ms                                                       |
| -Batttery Mode <--> Inverter Mode        | 0ms                                                       |
| -Inverter Mode --> bypass Mode           | 0ms                                                       |
| <b>Full Load Efficiency</b>              |                                                           |
| -Line mode with battery full charged     | 95% @ 230V output with typical load                       |
| -ECO mode                                | ≥98%                                                      |

| Overload Capability             |                                   |
|---------------------------------|-----------------------------------|
| -Line mode                      | 100%<Load≤105%: Constant          |
|                                 | 105%<Load≤125%: 10 minutes        |
|                                 | 125%<Load≤150%: 30s               |
|                                 | >150% :500ms                      |
| -Battery mode                   | 100%<Load≤105%: Constant          |
|                                 | 105%<Load≤125%: 1 minutes         |
|                                 | 125%<Load≤150%: 30s               |
|                                 | >150% :500ms                      |
| -Bypass Mode                    | 105%<Load≤125%: Constant          |
|                                 | 125%<Load≤150%: 30s               |
|                                 | Load>150%: 500ms                  |
| BATTERY                         |                                   |
| -Inner Battery Rating/Type      | NO                                |
| -External battery connection    | Connector                         |
| -Back-up Time (50% load)        | /                                 |
| -Back-up Time (70% load)        | /                                 |
| -Back-up Time (full load)       | /                                 |
| -DC Voltage                     | 192VDC (192V~240V adjustable)     |
| -Battery-Low Voltage            | 11.4V/pc                          |
| -Battery Shutdown Voltage       | 10.5V/pc                          |
| -Leakage current                | <300uA                            |
| -Battery fuse current           | 100A                              |
| Charger                         |                                   |
| -Charger current                | default 4A (0~12A adjustable)     |
| -Floating Voltage Phase         | 13.65V/pc                         |
| -Charging time                  | /                                 |
| Features                        |                                   |
| -ECO Mode                       | YES                               |
| -Battery Capacity Calculation   | YES                               |
| -Fan Speed Control              | YES                               |
| -Frequency Converter Mode(CVCF) | YES, 60% load                     |
| -Maintenance Bypass Switch      | factory optional                  |
| -Parallel                       | optional (up to 3 units)          |
| INDICATOR & ALARM               |                                   |
| -Display                        | Multi-language LCD + status LED   |
| -Battery mode                   | Beeps every four second           |
| -Battery low                    | Sounding every second             |
| -Overload                       | Sounding twice every second       |
| -Fault                          | Continuous beeping                |
| INTERFACE                       |                                   |
| -RS232                          | YES                               |
| -USB                            | YES                               |
| -EPO Function                   | YES                               |
| -Comm slot box                  | YES                               |
| -Comm card                      | Optional(NMC/Moudbus/Dry Contact) |
| -Dry Contact (Dry in/Dry out)   | YES                               |
| -Input connection               | TB                                |
| -Outlet socket                  | TB                                |

|                                                                                       |                                |
|---------------------------------------------------------------------------------------|--------------------------------|
| <b>MECHANICAL</b>                                                                     |                                |
| -WxHxD(mm)                                                                            | 438* 86.2* 573                 |
| -Net weight( Kg)                                                                      | 15                             |
| -Wheels                                                                               | NO                             |
| <b>ENVIRONMENTAL</b>                                                                  |                                |
| Operating Temperature Range                                                           | 0°C ~ 40 °C (40~50°C 50% load) |
| Relative Humidity                                                                     | 0 ~ 95% (No condensing)        |
| Audible Noise(>75% load, charger current >2A)                                         | ≤60dB                          |
| Audible Noise(>75% load, charger current <2A or 50%~75% load, charger current > 2A)   | ≤55dB                          |
| Audible Noise(50~75% load, charger current <2A or 25%~50% load, charger current > 2A) | ≤50dB                          |
| Audible Noise(25~50% load, charger current <2A or 0%~25% load)                        | ≤45dB                          |
| <b>REGULATIONS</b>                                                                    |                                |
| -ESD                                                                                  | IEC 61000-4-2 Level 3          |
| -RS                                                                                   | IEC 61000-4-3 Level 3          |
| -EFT                                                                                  | IEC 61000-4-4 Level 4          |
| -Surge                                                                                | IEC 61000-4-5 Level 4          |
| -Conduction                                                                           | IEC 62040-2 Category C3        |
| -Radiation                                                                            | IEC 62040-2 Category C3        |
| -Safety                                                                               | CE                             |
| -Transportation                                                                       | ISTA 1A                        |
| -Protection                                                                           | IP20 (static)                  |
| -Performance classification                                                           | VFI-SS-111                     |
| <b>ACCESSORIES</b>                                                                    |                                |
| -User manual                                                                          | Yes                            |
| -feet                                                                                 | Yes                            |



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