

## HXDM-20W SERIES



## FEATURES

- Universal AC Input/ Full Range
- DC OK Signal Output
- Protection: Short Circuit/Overload/ Over Voltage
- Installation On DIN Rail TS-35/7.5 & 15
- DC Output Voltage Adjustable
- 4 Years Warranty
- Works on DC Input (120~370VDC) also

IS 13252 (Part 1) 2010/  
IEC 60950-1:2005  
R-62006220  
www.bis.gov.in



HXDM-20 is a slim line power family are designed with slim plastic housing and for full range AC input from 90VAC To 264VAC. The series are single phase PSU, providing DC OK relay contact and adjustable DC output voltage. They have high efficiency and operate in wide temperature range. The series can widely used for industrial automation & control systems, varied equipments etc.

## SELECTION GUIDE

| Product Model | DC Voltage | Rated Current(max) | Rated Power |
|---------------|------------|--------------------|-------------|
| HXDM-20-05    | 5V         | 3A                 | 15W         |
| HXDM-20-12    | 12V        | 1.67A              | 20W         |
| HXDM-20-15    | 15V        | 1.34A              | 20W         |
| HXDM-20-24    | 24V        | 1A                 | 24W         |

## INPUT CHARACTERISTICS

| Parameter            | Units                 | Model      |
|----------------------|-----------------------|------------|
| VOLTAGE RANGE        | 90-264VAC/120-370VDC  |            |
| FREQUENCY RANGE      | 47~63Hz               |            |
| INRUSH CURRENT(TYP.) | 20A/115VAC cold start |            |
|                      | 40A/230VAC cold start |            |
| AC CURRENT(TYP.)     | 0.55A/115VAC          |            |
|                      | 0.35A/230VAC          |            |
| LEAKAGE CURRENT      | <1mA/240VAC           |            |
| EFFICIENCY           | 77%                   | HXDM-20-05 |
|                      | 81%                   | HXDM-20-12 |
|                      | 81%                   | HXDM-20-15 |
|                      | 84%                   | HXDM-20-24 |

## OUTPUT CHARACTERISTICS

| Parameter            | Units        | Model      |
|----------------------|--------------|------------|
| RIPPLE & NOISE(MAX.) | 80mVp-p      | HXDM-20-05 |
|                      | 120mVp-p     | HXDM-20-12 |
|                      | 120mVp-p     | HXDM-20-15 |
|                      | 150mVp-p     | HXDM-20-24 |
| VOLTAGE ADJ. RANGE   | 4.75~5.5V    | HXDM-20-05 |
|                      | 10.8 ~ 13.2V | HXDM-20-12 |
|                      | 13.5 ~ 16.5V | HXDM-20-15 |
|                      | 21.6 ~ 26.4V | HXDM-20-24 |

| Parameter           | Units                            |
|---------------------|----------------------------------|
| VOLTAGE TOLERANCE   | ±2.0%                            |
| LINE REGULATION     | ±1.0%                            |
| LOAD REGULATION     | ±5.0%                            |
| SETUP, RISE TIME    | 500ms, 30ms/230VAC at full load  |
|                     | 1000ms, 30ms/115VAC at full load |
| HOLD UP TIME (TYP.) | 50ms/230VAC at full load         |
|                     | 20ms/115VAC at full load         |

## PROTECTION

| Parameter    | Units                                                                                 | Model      |
|--------------|---------------------------------------------------------------------------------------|------------|
| OVER LOAD    | Above 105% Rated Output Power                                                         |            |
|              | Protection type: Hiccup Mode- recovers automatically after fault condition is removed |            |
| OVER VOLTAGE | 5V:5.75~ 6.75V                                                                        | HXDM-20-05 |
|              | 12V:13.8 ~ 16.2V                                                                      | HXDM-20-12 |
|              | 15V:17.25 ~ 20.25V                                                                    | HXDM-20-15 |
|              | 24V:27.6 ~ 32.4V                                                                      | HXDM-20-24 |
|              | Protection type : Shut down o/p voltage, re-power on to recover                       |            |

| Parameter             | Units                                    |
|-----------------------|------------------------------------------|
| OPERATING TEMPERATURE | -20°C to 70°C(Refer to "Derating Curve") |
| STORAGE TEMP          | -40°C to 85°C                            |
| STORAGE HUMIDITY      | 10 ~ 95% RH                              |
| WORKING HUMIDITY      | 20% ~ 90% RH Non-Condensing              |

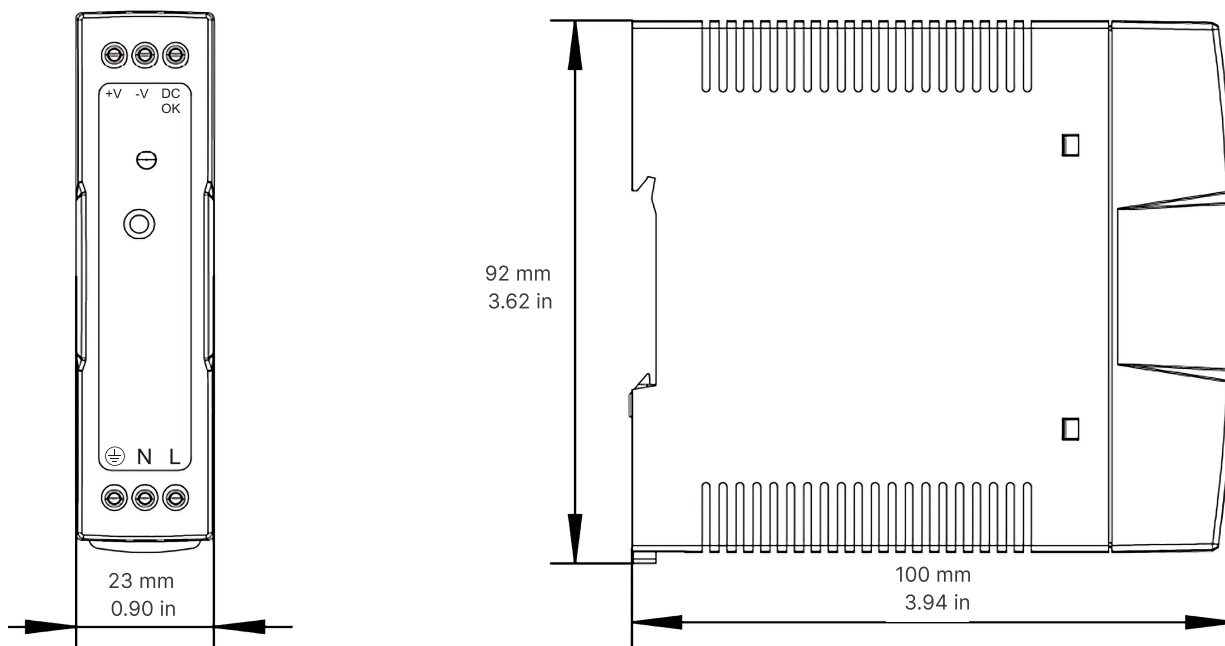
## SAFETY & EMC

| Parameter            | Units                                                     |
|----------------------|-----------------------------------------------------------|
| SAFETY REGULATIONS   | BS/EN62368-1 approved                                     |
| WITHSTAND VOLTAGE    | I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC                 |
| ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH |
| EMC EMISSION         | BS EN/EN 55032 class B, BS EN/EN IEC 61000-3-2,3          |
| EMC IMMUNITY         | BS EN/EN61000-4-2,3,4,5,6,8,11                            |

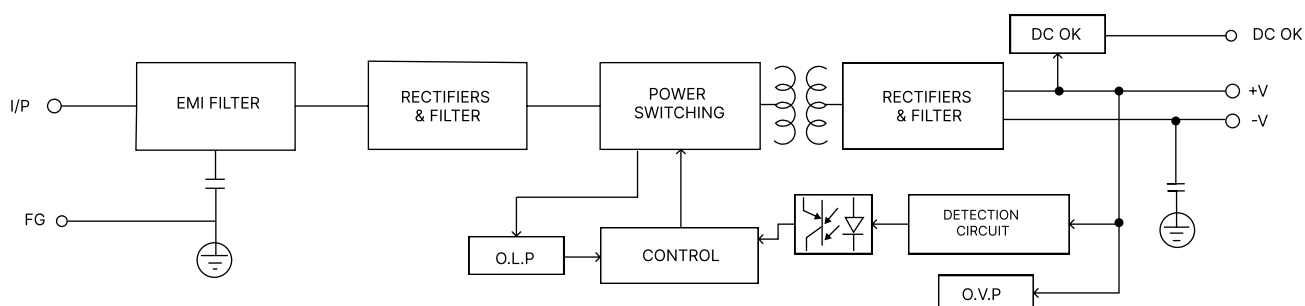
## DIMENSIONS, WEIGHT & PACKING

| Parameter                | Units                   |
|--------------------------|-------------------------|
| SIZE:                    | 23*100*92mm (LxWxH)     |
| WEIGHT:                  | 140g                    |
| CARTON SIZE:             | 54 × 30 × 24 CM         |
|                          | 21.26 × 11.81 × 9.45 in |
| MASTER CARTON QUANTITIES | 100pcs / Carton         |

## DIMENSIONS AND INSTALLATION

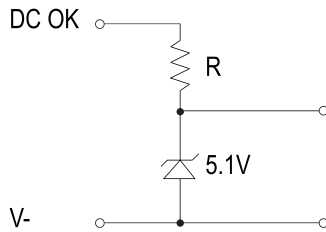


## FUNCTIONAL DIAGRAM



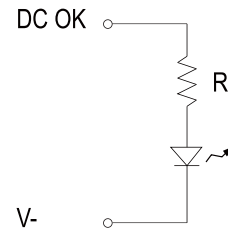
### APPLICATION OF DC OK ACTIVE SIGNAL

#### (a) 5V signal



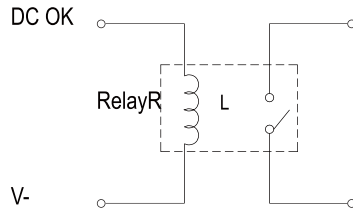
| Model | R                 |
|-------|-------------------|
| 5V    | $\geq 200\Omega$  |
| 12V   | $\geq 1.5K\Omega$ |
| 15V   | $\geq 2K\Omega$   |
| 24V   | $\geq 3.9K\Omega$ |

#### (b) LED



| Model | R                 |
|-------|-------------------|
| 5V    | $\geq 1K\Omega$   |
| 12V   | $\geq 2.4K\Omega$ |
| 15V   | $\geq 3K\Omega$   |
| 24V   | $\geq 4.7K\Omega$ |

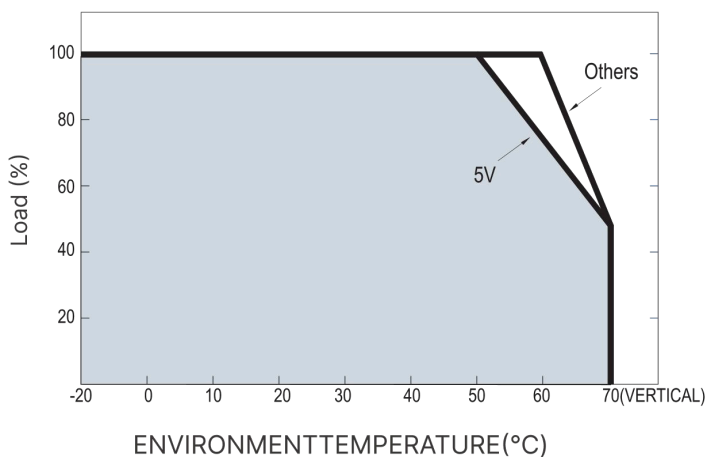
#### (c) Relay



| Model | RL                |
|-------|-------------------|
| 5V    | $\geq 120\Omega$  |
| 12V   | $\geq 700\Omega$  |
| 15V   | $\geq 700\Omega$  |
| 24V   | $\geq 1.2K\Omega$ |

### GRAPHS

#### APPLICATION OF DC OK ACTIVE SIGNAL



#### OUTPUT DERATING VS INPUT VOLTAGE CURVES

