



LME:009C

LOCOMOTIVE ENGINEERING DEPTT.

PURCHASE SPECIFICATION

LME/ PUR/334

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REV.NO.: 00

REV. DT.:

SHEET OF 3

SPECIFICATION FOR

DC-DC CONVERTER 24V -72V, 100Watts FOR CAB FAN

Enclosures : Nil

Rev	Date	Prepared	Rev	Date	Prepared	Rev	Date	Prepared
		Approved			Approved			Approved
Rev	Date	Prepared	Rev	Date	Prepared	Rev	Date	Prepared
		Approved			Approved			Approved

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12/07/17

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Distribution : Loco Prod'n.
(001)

Loco PPC
(002)

Loco QC
(003)

Tech.
(004)

CQX
(005)



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1. GENERAL

This specification covers the manufacture and supply of DC-DC Converter for cab fan to be used on Diesel Electric Locomotive.

2. Service Condition**2.1. Ambient Temperature**

-10° C to +85° C with maximum relative humidity of 100% (Saturation). The locomotive will be working in altitude up to maximum of 1000meters above sea level.

2.2. Shocks and Vibrations

During normal working of the locomotive the equipment will be subjected to vibration and buffing shocks as indicated below:

Vertical acceleration	-	1.0g	Maximum
Lateral Acceleration	-	0.5g	Maximum
Longitudinal Acceleration	-	3.0g	Maximum

3. Compliance with National Standards

The DC-DC Converter to be supplied against this purchase specification shall be complied to IEC 571.

4. Dimension and Tolerances

Manufacturer should specify dimensional tolerance for the DC- DC Converter .

5. Deviation

Any deviation from the standard laid down with a view to improve the performance, utility, efficiency and reliability may be given due consideration provided full particulars and justifications there of are furnished along with the offer.

6. Technical Details

6.1. Technical details of the DC-DC Converter are as under :-

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Power Supply (DC-DC Converter) as per Following Technical Spec.

1.	In put Voltage	18vdc -27vdc
2.	Output	72Vdc
3.	Output Rating	100watts
4.	Line Regulation	+/- 1% (at connector end)
5.	Load Regulation	+/-1% (at connector end)
6.	Output Ripple	1% VNOM@20MHZ bandwidth (at connector end)
7.	Output Short ckt.	Inbuilt
8.	Operating Temp	-10 ⁰ C to +85 ⁰ .C
9.	Thermal Shutdown	Inbuilt
10.	Cooling	Free air
11.	Visual Indication	(i) Input Ok (ii) Output Ok
12.	Max. Dimensions	200mm X 200mm X100mm (L) (W) (H)

7. Drawings

The supplier should submit the following drawing along with the offer: -

- I) General arrangement Drawing showing mounting arrangement.
- II) Electrical Schematic of the DC- DC Converter
- III) Operating and service manual of the DC-DC Converter

8. Guarantee

The supplier shall guarantee all the equipments as a whole against any manufacturing, material and workmanship for a period of 30 months from date of dispatch or 24 months from date of commissioning whichever is earlier. In case any damage or defect noticed during this period due to defective material or workmanship, the equipment shall be replaced/Repaired free of cost by supplier. If any modification in the system is required to be done for improving the performance of the system shall be carried out free of cost by manufacturer

9. Clause wise Comment

Clause wise clause comments are to be submitted alongwith the offer. In absence of the clause wise clause comment offer is liable for rejection.

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