

1847110/2023/HEP-SWM20915

TYPE – III : 400 mm SWEEP, SWIVEL TYPE, 110 V DC FAN

1. Fans shall be generally conforming to IS:6680-1992 with deviations as per RDSO Annexure-H, (Dec-2005).
2. Motor body shall be of Aluminium die casting conforming to IS:617-94 grade 4600 having C.I bush at both the bearing ends.
3. Motor body, Outer body/Carcass, Fan base, Fan bracket and guard shall be powder coated to Silver ash metallic finish to HYC 100 of M/s.HAWCOPLAST / 95-03014 of MARPOL. The thickness of the powder coating shall not be less than 60 microns.
4. Fan Blades shall be of Knife Type Shape with M.S. Bush for fixing of the blade to the shaft and Fire Retardant Plastic (FRP) material in light grey colour with injection moulding process. Blades material shall have the properties as per optional clause 20.1 of IS 6680-92 with RDSO Annexure-H (Dec-2005). Weight of residue / ash content after carrying out the ash content testing as per ISO 345-1-1 shall be around 33-38 %. This 33-38 % residue / ash contains minimum 30 % Glass fibre and 3 to 8 % other residue e.g. fire retardant agents, pigments, and coupling agents. Adequate strengthening of fan blades shall be made to ensure no distortion of blades occurs with passage of time. FRP Blade shall be with M.S. Bush for fixing of the blade to the shaft in place of Aluminum Bush.
5. Fan Blade shall be conforming to Drg no: RDSO/PE/SK/TL/0108-2008, Alt.1.
6. FRP Fan Blade to be procured from RDSO approved sources as per annexure-1 of RDSO spec. RDSO/PE/SPEC/TL/0050, (rev.1).
7. Firm shall ensure the fixing arrangement of fan blade to IS: 6680-92 with RDSO Annexure-H (Dec-2005) to ensure interchangeability with M.S fan blade.
8. Fan guard shall be crashworthy to ICF drawing No. ICF/SK-7-6-158,Alt.'f'.
9. Welding of Spiral wire in guard should be at all contact points and high quality and strength. Spiral wire should be of single piece only.
10. Guard round plate shall have individual Railway logo as per RDSO/SK-CSC-1124, A (but maximum dimensions scaled down to required size) and not the name of the manufacturer.
11. The securing of inspection dome cover shall be as per fig.19 of IS 6680-92 with RDSO Annexure-H (Dec-2005).
12. For clause no.8.10.1 of IS: 6680-92: In lieu of the existing FRP-2 way connector, FLYBACK connector assembly suitable for 2.5 sq.mm E-Beam cables with Wire End Ferrule shall be provided. Makes M/S Wago, M/S Phoenix & M/S WeidMuller are only acceptable.
13. All fans shall be supplied without speed regulator and resistance box.
14. The mounting hole shall be of $\phi 9$ mm at 108mm PCD as specified in the drawing RDSO/PE/SK/TL/0025-2002, (REV.0), ALT .3.
15. The Assembly shall generally conform to Fig-6 of IS: 6680-92 with RDSO Annexure-H (Dec-2005).
16. Rubber packing to ICF Drg. ICF/SK-7-3-058/Item-1, Alt.'e' shall be supplied along with fans.
17. The connecting leads shall be 1.5 Sq.mm E-Beam cables to RDSO Spec. ELRS/SPEC/ELC/0019, Rev-2 and 560 mm long, measured from outside the motor body crimped with suitable lug for termination on FLYBACK connector side and Fan body side.
18. Carbon brushes will be of RDSO approved make and Carbon brush springs will as per RDSO Drg. SKEL-3722, Alt.1.
19. Maximum weight of the Fan shall not exceed 9 kg.
20. Colour of the rating plate shall be Black.
21. Ball bearing of SKF/FAG makes shall be provided at each end of the fan.
22. The Fans shall be supplied in assembled condition in individual carton box with suitable packing.
23. The location of the terminals inside the fan should be such as, it does not infringe with any metallic part while closing the cover.
24. ICF/RCF/RDSO approved sources only be considered.
25. Rites inspected hologram should be fixed on fan body only.
26. Firm shall carry out 100% routine internal test with fully assembled sets including guards on position.
27. Firm manufacturing for the first time shall get the prototype approval from CEE/ICF after commissioning on the coach to avoid any teething problems before bulk supply.