

1. DESCRIPTION OF EQUIPMENT

The type VARKIE S55X squirrel cage induction motors are manufactured from Grade 260 Grey Iron (Cast iron) and comprise of a stator casing, DE endshield, NDE endshield, and connection box. The motor had a general length of ± 399 mm and an internal free volume of approximately 2.0 ℓ . The motor has a connection box which is fabricated to the motor casing. The connection box made provision for one cable gland which formed part of the connection box housing. The motor stator casing and connection box was separated by means of epoxy resin. The connection box had an internal free volume of approximately 0.5 ℓ .

The motor incorporated the following flameproof joints:

Location of joint	Type of joint	Seals
Motor casing & Oil Box (DE endshield) Drawing # VARKIE S55X Flameproof assy Detail C	Spigot	Nitrile O-ring type seal fitted into a groove on the oil box (DE End-shield).
Oil box (DE endshield) & Inner Bearing cover Drawing # VARKIE S55X Flameproof assy Detail E	Flange joint	N/A
DE Inner bearing cover & DE shaft Drawing # VARKIE S55X Flameproof assy Detail E	Cylindrical	N/A
Motor Casing & NDE Endshield Drawing # VARKIE S55X Flameproof assy Detail C	Spigot	Nitrile O-ring type seal fitted into a groove on the flameproof cover.
Connection Box & Motor Casing Drawing # VARKIE S55X Flameproof assy Detail F	Flange	FKM O-ring type seal fitted into a groove on the cover.
Connection Box & Packing gland assembly Drawing # VARKIE S55X Flameproof assy Detail G	Cable Gland	Polycast 1001/1022/0457 type packing gland seal fitted.
Connection Box & Lead through Seal Drawing # VARKIE S55X Flameproof assy Detail F	Cemented	N/A

Fasteners

The following fasteners were used in the assembly of the motor:

Location	Qty	Size & Length	Pitch	Class
Motor Casing & oil box (DE Endshield)	8	HTS Capscrews M10 x 30	1.5	SS304
Oil box (DE Endshield) & Inner Bearing Cover	4	HTS Capscrews M8 x 25	1.25	SS304
Motor Casing & NDE Endshield	8	HTS Capscrews M10 x 30	1.5	SS304
Connection Box & Motor Casing	6	HTS Capscrews M10x25	1.25	SS304
Connection Box & Cable Gland	4	HTS Capscrews M8 x 25	1.25	SS304
Gland Clamp	2	HTS Capscrews M8x25	1.25	SS304

2. SPECIAL CONDITIONS FOR SAFE USE (denoted by X after certificate number)

Some flamepath dimensions are different than the relevant values given in Table 1 of SANS 60079-1. For repair work the Original Equipment Manufacturer must be consulted for information regarding the flamepath lengths. (Refer to Operation Manual AP/PM550/0616)

The product temperature displaced by the pump may not exceed a temperature of 55°C.

