



## D5T

<b>Model</b>	D5T
<b>Power</b>	Up to 240 kW
<b>Voltages</b>	Up to 690 V
<b>Atex protection</b>	Ex d I Mb
<b>Frame</b>	160 ± 315
<b>Poles</b>	2, 4, 6, and 8
<b>Cooling</b>	IC 411 on request IC 416
<b>IP</b>	IP 55 / 56 / 65
<b>Enclosure</b>	TEFC – Totally Enclosed Fan Cooled Motors.
<b>Main Applications</b>	Centrifugal & reciprocating compressor, Conveyor systems, Cranes, Extruders and expanders, Heat exchangers and blowers, Mills, Mixers, Pumps
<b>Sector</b>	Oil&Gas

Poles	<b>2 Poles</b>	<b>4 Poles</b>	<b>6 Poles</b>	<b>8 Poles</b>	
kW	240	240	192	158	

Certificates and testing																
<b>Certificate</b>	Motors are certified by CESI. Ex d according to IEC/EN 60079-15 and ATEX directive 94/9/EC.															
Main components																
<b>Housing</b>	Frame is made in cast iron. (EN 1561-GJL-200 or better)															
<b>Shield</b>	Made in cast-iron (EN 1561 – GJL 200)															
<b>Shaft</b>	<b>General data</b> Made in carbon steel (EN 10083 – 2 C45) <b>Shaft design</b> Cylindrical shaft with key.															
<b>Main terminal box</b>	Mounted on top. Made in cast iron. (EN 1561 – GJL 200)															
<b>Fan</b>	<table border="1"> <tbody> <tr> <td>Frame</td> <td>160 ± 280</td> <td colspan="3">315</td> </tr> <tr> <td>Pole</td> <td>-</td> <td>-</td> <td>2 ± 6</td> <td>8</td> </tr> <tr> <td>Material</td> <td colspan="3">Thermoplastic reinforced with glass fibres</td> <td>Metallic</td> </tr> </tbody> </table>	Frame	160 ± 280	315			Pole	-	-	2 ± 6	8	Material	Thermoplastic reinforced with glass fibres			Metallic
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Construction																
<b>Cooling System</b>	IC 411 as per IEC60034-6. Totally enclosed standard motor, frame surface cooled with fan 4: frame surface cooled 1: self circulation of primary coolant 1: self circulation of secondary coolant On request for variable speed application an external ventilation unit can be supplied to get the IC416 cooling type.															
<b>Degree of protection</b>	IP 55 as per IEC60034-5. (Available up to IP 65)															
Technical data																
<b>Stator/Rotor core</b>	Laminated and enamel-insulated on both sides to minimise eddycurrent losses. The stator winding is made in flat copper or round copper wire depending on the machine size. The completely wound stator pack with housing is thereby impregnated in an epoxy-resin VPI. The subsequent heat treatment hardens the resin.															

<b>Rotor</b>	<p>Short circuit rotor type.</p> <p>Depending on machine size, the rotor construction is usually a solid shaft type.</p> <p>The rotor winding can be either a pressure die cast aluminum or a copper bar construction.</p>
<b>Bearing</b>	<p><b>General data</b></p> <p>Motors are normally fitted with single-row deep groove ball bearings.</p> <p>Up to 132 frame size bearings are lubricated for life.</p> <p>Up to 250 frame size motors are supplied with prelubricated ball bearings without grease nipples.</p> <p>From 280 frame size and above motors are supplied with regreasable bearings and greasing nipples on both ends.</p> <p>The motor bearings are designed according to the principle that the locating bearings are on the D end side and the floating bearings on the ND end side.</p> <p>Bearings are first greased in the factory with lithium base grease.</p> <p>The used grease is removed through a valve locked in the outer bearing cover.</p>
<b>Impregnation system</b>	<p>Stator is VPI treated with an unsaturated polyester amide resin which is polymerisation in an oven.</p>
<b>Insulation system</b>	<p>Stator: F class insulated with a synthetic enamel. (H class insulation available on request)</p>
<b>Protective treatments</b>	<p>Specific Oil&amp;gas treatment.</p>
<b>Vibrations</b>	<p>Mechanical vibrations correspond to the limits specified in EN 60034-14 and are certified by the test room.</p>
<b>Rating plate</b>	<p>Stainless steel, thickness 0,5 mm.</p>

## Optional features

### List

Reinforced insulation suitable for frequency converter application  
dual / multiple winding configuration  
special shaft end on both sides  
increase protection degree up to IP 56 / 65  
encoder  
vibration sensors  
special frame design to suite the application  
insulated bearings design  
other options available on request.