

**Laboratory** Testing Electrical Standards Laboratory and R & D Institute Private Limited, (B1+B2+B3)/24, G.I.D.C. Electronics Estate, Sector-25, Gandhinagar, Gujarat

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
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**ELECTRICAL TESTING**

I.	ROTATING ELECTRICAL MACHINES			
1.	Submersible pump set (0.37 kW to 75 kW)	Verification of Marking/ Rating plate	IS 8034:2018 Cl. No. 14	Qualitative
	Regenerative self priming pump (0.18 kW to 3.7 kW)		IS 8472:1998 Cl. No. 17.1	
	Monoset pump for agricultural purpose (0.37 kW to 25 kW)		IS 9079:2018 Cl. No. 15	
	Submersible Motors (0.37 kW to 75 kW)		IS 9283:2013 Cl. No. 15	
	Pumps sewage and drainage (0.37 kW to 75 kW)		IS 5600:2002 Cl. 19	
	Openwell submersible pump set (0.12 kW to 45 kW)		IS 14220:2018 Cl. No. 18	

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	1-Phase Induction motor for Agricultural Purpose (0.37 kW to 3.7 kW)		IS 14582:1998 Cl. No. 15.1	
	Textile Motor (0.37 kW to 22 kW)		IS 2972-1:1979 Cl. No. 15	
	Squirrel cage induction motor for centrifugal and agricultural purpose (0.37 kW to 15 kW)		IS 7538:1996 Cl. No.: 20.1	
	3-Phase Energy Efficient induction motor (0.12 kW to 45 kW)		IS 12615:2018 Cl. No. 18 & IS/IEC 60034-1:2010 (IS 15999(Part 1-2016)) Cl No. 10.2	
	1-ph AC Induction Motor (0.12 kW to 2.2 kW)		IS 996:2009 Cl. No. 16	
2.	Squirrel cage induction motor for centrifugal and agricultural purpose (0.37 kW to 15 kW)	Verification of Terminal marking	IS 7538:1996 Cl. No. 19.1.1	Qualitative

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	1-Phase Induction motor for Agricultural purpose (0.37 kW to 3.7 kW)		IS 14582:1998, Cl. No. 14	
	3 Phase Energy Efficient induction motor (0.12 kW to 45 kW)		IS 12615:2018 Cl. No. 9 & IS/IEC 60034-8:2002	
	Textile Motor (0.37 kW to 22 kW)		IS 2972-1:1979 Cl. No. 15.1	
	Submersible Motors (0.37 kW to 75 kW)		IS 9283:2013 Cl. No. 13	
	1-ph AC Induction Motor (0.12 kW to 2.2 kW)		IS 996:2009 Cl. No. 14	
	Submersible pump set (0.37 kW to 75 kW)		IS 8034:2018 Cl. No. 8.8	
	Monoset pump for agricultural purpose (0.37 kW to 25 kW)		IS 9079:2018 Cl. No. 10.6	
	Openwell submersible pump set		IS 14220:2018 Cl. No. 10.7	

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	(0.12 kW to 45 kW)			
3.	Submersible pump set (0.37 kW to 75 kW)	Submersible Cable	IS 8034:2018 Cl. No. 8.6	1 mm to 5000 mm
4.	Submersible pump set (0.37 kW to 75 kW)	Typical Installation Diameter of Pumpsets	IS 8034:2018 Cl. No. 8.9.4	0.02 mm to 1000 mm
5.	Squirrel cage induction motor for centrifugal and agricultural purpose (0.37 kW to 15 kW)	Earthing	IS 7538:1996 Cl. No. 11	Qualitative
	Openwell submersible pump set (0.12 kW to 45 kW)		IS 14220:2018 Cl. No. 10.6	
	Submersible Motor (0.37 kW to 75 kW)		IS 9283:2013 Cl. No. 5.2.1	
	Textile Motor (0.37 kW to 22 kW)		IS 2972-1:1979 Cl. No. 9	
	3-Phase Energy Efficient induction motor (0.12 kW to 45 kW)		IS 12615:2018 & Cl.No. 8 & IS/IEC 60034-1:2010 (IS 15999(Part 1-2016)) Cl No. 11.1	

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	Monoset pump for agricultural purpose (0.37 kW to 25 kW)		IS 9079:2018 Cl. No. 10.5	
	1-ph AC Induction Motor (0.12 kW to 2.2 kW)		IS 996:2009 Cl. No. 9.5	
6.	Monoset pump for agricultural purpose (0.37 kW to 25 kW)	Stator Resistance	IS 9079:2018 Cl.No. 11.18.1 (a)	1999 $\mu\Omega$ to 19.99 K $\Omega$
	Submersible Motors (0.37 kW to 75 kW)		IS 9283:2013 Cl. No.16.1 (c)	
	Submersible pump set (0.37 kW to 75 kW)		IS 8034:2018 Cl. No. 9.10(c)	
	Openwell submersible pump set (0.37 kW to 45 kW)		IS 14220:2018 Cl. No.14.10.1(c)	
	3-Phase Energy Efficient induction motor (0.12 kW to 45 kW)		IS12615:2011 Cl. No 16.1.2 & IS/IEC 60034-1:2010 (IS 15999(Part 1-2016)) Cl No. 5.7	
	Textile Motor (0.37 kW to 22 kW)		IS 2972-1:1979 Cl. No 18.3.1(a)	

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	Squirrel cage induction motor for centrifugal and agricultural purpose (0.37 kW to 15 kW)		IS7538:1996 Cl. No.: 22.3.1(b)	
	1-Phase Induction motor for Agricultural Purpose (0.37 kW to 3.7 kW)		IS14582:1998 Cl. No.:16.2 (a)	
7.	Monoset pump for agricultural purpose (0.37 kW to 25 kW)	No Load Test at Rated Voltage	IS 9079:2018 Cl. No. 11.18.1(d)	1 RPM to 99999 RPM 0.01 to 600 V 0.01 to 250A 0.01 to 75 kW
	Submersible Motors (0.37 kW to 75 kW)		IS 9283:2013 Cl. No. 16.1 (d)	
	Submersible pump set (0.37 kW to 75 kW)		IS 8034:2018 Cl. No. 9.9(c)	
	Openwell submersible pump set (0.37 kW to 45 kW)		IS 14220:2018 Cl. No. 14.10.1(d)	
	Regenerative self priming pump (0.18 kW to 3.7 kW)		IS 8472:1998 Cl. No.: 14.1.2	

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	3-Phase Energy Efficient induction motor (0.12 kW to 45 kW)		IS 12615:2018 Cl. No. 16.1.3 & IEC 60034-2-1:2007 Cl. No. 6.1.3.2.4	
	Textile motor (0.37 kW to 22 kW)		IS 2972-1:1979 Cl. No. 18.3.1 (b)	
	Squirrel cage induction motor for centrifugal and agricultural purpose (0.37 kW to 15 kW)		IS 7538:1996 Cl. No.: 22.3.1(c)	
	1-Phase Induction motor for Agricultural Purpose (0.37 kW to 3.7 kW)		IS 14582:1998 Cl. No.: 16.2 (b)	
	1-Phase Induction motor (0.12 kW to 2.2 kW)		IS 996:2009 Cl. No.: 17.3(a)	
8.	Monoset pump for agricultural purpose (0.37 kW to 25 kW)	Reduced voltage Running up	IS 9079:2018 Cl. No. 11.18.1(g)	1 RPM to 99999 RPM 0.01 V to 600 V 0.01A to 250A
	Submersible Motors (0.37 kW to 75 kW)		IS 9283:2013 Cl. No. 16.1 (e)	

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	Submersible pump set (0.37 kW to 75 kW)		IS 8034:2018 Cl. No. 9.10(e)	
	Openwell submersible pump set (0.12 kW to 45 kW)		IS 14220:2018 Cl. No.: 14.9.1(e)	0.01 kW to 75 kW
	3-Phase Energy Efficient induction motor (0.12 kW to 45 kW)		IS 12615:2018 Cl. No 16.1.5	
	Textile Motor (0.37 kW to 22 kW)		IS 2972-1:1979 Cl. No. 18.3.1 (c)	
	Squirrel cage induction motor for centrifugal and agricultural purpose (0.37 kW to 15 kW)		IS 7538:1996 Cl. No.: 22.3.1(d)	
9.	3-Phase Energy Efficient induction motor (0.12 kW to 45 kW)	Full load / Load / Determination of Efficiency	IS 12615:2018 Cl. No. 15 & IS/IEC 60034-1:2010 (IS 15999(Part 1-2016)) Cl No. 6 & 8	0.01 A to 150 A
	Textile Motor (0.37 kW to 22 kW)		IS 2972-1:1979 Cl. No. 18.3.1 (e)	
	Squirrel cage induction motor		IS 7538:1996 Cl. No.: 22.3.1(f)	1 RPM to 99999 RPM 0.01 V to 600 V



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	for centrifugal and agricultural purpose (0.37 kW to 15 kW)			0.01 kW to 75 kW
	1-Phase Induction motor for Agricultural Purpose (0.37 kW to 3.7 kW)		IS 14582:1998 Cl. No.: 16.2 (e)	
	Submersible Motors (0.37 kW to 75 kW)		IS 9283:2013 Cl. No. 16.1 (g)	
	1-Phase Induction motor (0.12 kW to 2.2 kW)		IS 996:2009 Cl. No. 17.3(d)	
10.	Squirrel cage induction motor for centrifugal and agricultural purpose (0.37 kW to 15 kW)	Momentary overload	IS 7538:1996 Cl. No.: 22.3.1(k)	Qualitative
	1-Phase Induction motor for Agricultural purpose (0.37 kW to 3.7 kW)		IS 14582:1998 Cl. No.: 16.2 (j)	
	Energy Efficient Induction Motors		IS 12615:2018 Cl. No. 12.1	

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	- Three Phase Squirrel Cage (0.12 kW to 45 kW)		& IS/IEC 60034-1:2010 (IS 15999 (Part 1-2016) CI No. 9.4	
	Textile Motors (0.37 kW to 22 kW)		IS 2972-1:1979 Cl. No. 18.3.1 (f)	
	Submersible pump set (0.37 kW to 75 kW)		IS 8034:2018 Cl. No. 9.10(m)	
	Submersible Motors (0.37 kW to 75 kW)		IS 9283:2013 Cl. No. 16.1 (m)	
	1-Phase Induction motor (0.12 kW to 2.2 kW)		IS 996:2009 Cl. No. 17.3(f)	
11.	Regenerative self priming pump (0.18 kW to 3.7 kW)	Temperature Rise at Rated Voltage	IS 8472:1998 Cl. No.: 14.1.2.1.1	0 to 200°C 1999 μΩ to 19.99 KΩ
	Monoset pump for agricultural purpose (0.37 kW to 25 kW)		IS 9079:2018 Cl.No. 11.4	
	Openwell submersible pump set (0.12 kW to 45 kW)		IS 14220:2018 Cl. No.: 4.6.5	0.01V to 600 V 0.01 A to 250 A 0.01kW to 75 kW 1 RPM to 99999 RPM 0.1 Nm to 500 Nm

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	Submersible pump set (0.37 kW to 75 kW)		IS 8034:2018 Cl. No. 9.5.2	
	3-Phase Energy Efficient induction motor (0.12 kW to 45 kW)		IS 12615:2018 Cl. No. 13 IS/IEC 60034-1:2010 (IS 15999(Part 1-2016) Cl No.8.6.2	
	Textile Motor (0.37 kW to 22 kW)		IS 2972-1:1979 Cl. No. 18.3.1 (g)	
	Submersible Motors (0.37 kW to 75 kW)		IS 9283:2013 Cl. No. 16.1 (j)	
	Squirrel cage induction motor for centrifugal and agricultural purpose (0.37 kW to 15 kW)		IS 7538:1996 Cl. No.: 22.3.1(h)	
	1-Phase Induction motor for Agricultural Purpose (0.37 kW to 3.7 kW)		IS 14582:1998 Cl. No.: 16.2 (g)	
	1-Phase Induction motor (0.12 kW to 2.2 kW)		IS 996:2009 Cl. No. 17.3(e)	

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12.	Regenerative self priming pump (0.18 kW to 3.7 kW)	Temperature Rise at Reduced Voltage/ at limiting value of voltage and frequency variation.	IS 8472:1998 Cl. No.: 14.1.2.1.2	0 to 200°C 1999 μΩ to 19.99 KΩ 0.01 V to 600 V 0.01 A to 250A 0.01 kW to 75 kW 1 RPM to 99999 RPM
	Monoset pump for agricultural purpose (0.37 kW to 25 kW)		IS 9079:2018 Cl. No. 11.4	
	Openwell submersible pump set (0.12 kW to 45 kW)		IS 14220:2018 Cl. No.: 14.6.6	
	Submersible pump set (0.37 kW to 75 kW)		IS 8034:2018 Cl. No. 9.5.3	
	Submersible Motors (0.37 kW to 75 kW)		IS 9283:2013 Cl. No. 16.1 (k)	
	1-Phase Induction motor for Agricultural purpose (0.37 kW to 3.7 kW)		IS 14582:1998 Cl. No.: 16.2 (h)	
	Squirrel cage induction motor for centrifugal and agricultural purpose		IS 7538:1996 Cl. No.: 22.3.1(j)	

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	(0.37 kW to 15 kW) 3-Phase Energy Efficient induction motor (0.12 kW to 45 kW)		IS 12615:2018 Cl. No. 16.3.5	
13.	Regenerative self priming pump (0.37 kW to 3.7 kW)	Locked Rotor	IS 8472:1998 Cl. No.: 14.1.2	0.01 A to 250 A 0.01 Nm to 500 Nm 0.01 V to 600 V 0.01 kW to 75 kW
	Openwell submersible pump set (0.37 kW to 45 kW)		IS 14220:2018 Cl. No. 14.10.1(f)	
	Submersible pump set (0.37 kW to 75 kW)		IS 8034:2018 Cl. No. 9.10(f)	
	Monoset pump for agricultural purpose (0.37 kW to 25 kW)		IS 9079:2018 Cl.No. 11.8.1(e)	
	3-Phase Energy Efficient induction motor (0.12 kW to 45 kW)		IS 12615:2018 Cl. No. 16.1.4 & 16.2.2	
	Textile Motor (0.37 kW to 22 kW)		IS 2972-1:1979 Cl. No. 18.3.1 (d)	
	Submersible Motors		IS 9283:2013	

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	(0.37 kW to 75 kW)		Cl. No. 16.1 (f)	
	Squirrel cage induction motor for centrifugal and agricultural purpose (0.37 kW to 15 kW)		IS 7538:1996 Cl. No.: 22.3.1(e)	
	1-Phase Induction motor for Agricultural Purpose (0.37 kW to 3.7 kW)		IS 14582:1998 Cl. No.: 16.2 (d)	
14.	- Squirrel cage induction motor for centrifugal and agricultural purpose (0.37 kW to 15 kW)	Efficiency at reduced voltage	IS 7538:1996 Cl. No.: 22.3.1(g)	0.01 A to 150 A 1 to 99999 RPM
15.	Regenerative self priming pump (0.18 kW to 3.7 kW)	High Voltage / High Potential / Withstand voltage	IS 8472:1998 Cl. No.: 14.1.2	Qualitative (up to 5 kV)
	Monoset pump for agricultural purpose (0.37 kW to 25 kW)		IS 9079:2018 Cl. No. 11.8.1(b)	
	Openwell submersible		IS 14220:2018 Cl. No. 14.10.1(b)	

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	pump set (0.12 kW to 45 kW)			
	Submersible pump set (0.37 kW to 75 kW)		IS 8034:2018 Cl. No. 9.10(b)	
	3-Phase Energy Efficient induction motor (0.12 kW to 45 kW)		IS 12615:2018 Cl. No. 16.1.6 & IS/IEC 60034-1:2010 (IS 15999(Part 1-2016) Cl No. 9.2	
	Textile Motor (0.37 kW to 22 kW)		IS 2972-1:1979 Cl. No. 18.3.1 (h)	
	Submersible Motors (0.37 kW to 75 kW)		IS 9283:2013 Cl. No. 16.1 (b)	
	Squirrel cage induction motor for centrifugal and agricultural purpose (0.37 kW to 15 kW)		IS 7538:1996 Cl. No.: 22.3.1(n)	
	1-Phase Induction motor for Agricultural Purpose (0.37 kW to 3.7 kW)		IS 14582:1998 Cl. No.: 16.2 (m)	
	1-Phase Induction motor		IS 996:2009 Cl. No.: 17.3 (h)	

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16.	(0.12 kW to 2.2 kW)			
	Regenerating self priming pump (0.18 kW to 3.7 kW)	Insulation Resistance	IS 8472:1998 Cl. No.: 14.1.2	0.01 MΩ to 500MΩ
	Monoset pump for agricultural purpose (0.37 kW to 25 kW)		IS 9079:2018 Cl.No. 11.8.1(c)	
	Submersible Motors (0.37 kW to 75 kW)		IS 9283:2013 Cl. No. 16.1 (a)	
	Submersible pump set (0.37 kW to 75 kW)		IS 8034:2018 Cl. No. 19.10(a)	
	Open well submersible pump set (0.12 kW to 45 kW)		IS 14220:2018 Cl. No. 14.10.1(a)	
	Energy Efficient Induction Motors - Three Phase Squirrel Cage (0.12 kW to 45 kW)		IS 12615:2018 Cl. No. 16.1.1	
	Textile Motor (0.37 kW to 22 kW)		IS 2972-1:1979 Cl. No. 18.3.1 (j)	
	Squirrel cage		IS 7538:1996	



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	induction motor for centrifugal and agricultural purpose (0.37 kW to 15 kW)		Cl. No.: 22.3.1(m)	
	1-Phase Induction motor for Agricultural Purpose (0.37 kW to 3.7 kW)		IS 14582:1998 Cl. No.: 16.2 (k)	
	1-Phase Induction motor (0.12 kW to 2.2 kW)		IS 996:2009 Cl. No.: 17.3 (g)	
17.	Induction Motors - Three Phase Squirrel Cage (0.37 to 15 kW)	Vibration	IS 7538:1996 Cl. No. 22.3.1 (p)	0.1 mm/s to 199 mm/s
	Energy Efficient Induction Motors - Three Phase Squirrel Cage (0.12 kW to 45 kW)		IS 12615:2018 Cl. No. 16.3.1	
	Textile Motor (0.37 kW to 22 kW)		IS 2972-1:1979 Cl No. 11	
	1-Phase Induction motor (0.12 kW to 2.2 kW)		IS 996:2009 Cl. No.; 17.3 (m)	

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18.	Submersible motor (0.37 kW to 75 kW)	Performance characteristic	IS 9283:2013 Cl. No. 16.1 (h)	Efficiency 0.37 kW to 75 kW	
19.	Regenerative self priming pump (0.18 kW to 3.7 kW)	Pump Performance - Voltage - Current - Power - Speed - Head - Flow	IS 8472:1998 Cl. No.: 13	0.01 A to 250 A 0.01 V to 600 V 0.01 kW to 75 kW	
	Monoset pump for agricultural purpose (0.37 kW to 25 kW)		IS 9079:2018 Cl. No. 13		
	Pumps sewage and drainage (0.37 kW to 75 kW)		IS 5600:2002 Cl. No.: 13		6.4 m to 642 m 0.01 lps to 1.11 lps 0.01 lps to 13.89 lps 0.01 lps to 69.45 lps 0.01 lps to 194.44 lps
	Submersible pump set (0.37 kW to 75 kW)		IS 8034:2018 Cl. No. 11		
	Open well submersible pump set (0.12 kW to 45 kW)		IS 14220:2018 Cl. No.: 14		
20.	Open well submersible pump set (0.12 kW to 45 kW)	Hydrostatic	IS 14220:2018 Cl. No. 15.5	Qualitative	
	Regenerative self priming pump		IS 8472:1998 Cl. No.: 13.3		

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	(0.18 kW to 3.7 kW)			
	Submersible pump set (0.37 kW to 75 kW)		IS 8034:2018 Cl. No. 10.3	
	Monoset pump for agricultural purpose (0.37 kW to 25 kW)		IS 9079:2018 Cl.No. 12.6	
21.	Regenerative self priming pump (0.18 kW to 3.7 kW)	Direction of Rotation	IS 8472:1998 Cl. No.: 9	Qualitative
	Submersible pump set (0.37 kW to 75 kW)		IS 8034:2018 Cl. No. 8.7	
	Monoset pump for agricultural purpose (0.37 kW to 25 kW)		IS 9079:2018 Cl.No. 10.6	
	Pumps sewage and drainage (0.37 kW to 75 kW)		IS 5600:2002 Cl. No.: 7	
22.	Energy Efficient Induction Motors - Three Phase Squirrel Cage (0.12 kW to 45 kW)	Pull up & Pull out Torque	IS 12615:2018 Cl.No.12.2	0.01 N-m to 500 N-m

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Textile Motor (0.37 kW to 22 kW)		IS 2972-1:1979 Cl No. 12.2, 12.3	
	1-Phase Induction motor (0.12 kW to 2.2 kW)		IS 996:2009 Cl.No.12.1.1	
23.	Submersible motor (0.37 kW to 75 kW)	Leakage Current	IS 9283:2013 Cl. No. 16.1 (n)	0.1 mA to 200 mA
	Submersible pump set (0.37 kW to 75 kW)		IS 8034:2018 Cl. No. 9.4	
	Openwell submersible pump set (0.12 kW to 45 kW)		IS 14220:2018 Cl. No.: 14.5	
	1-Phase Induction motor (0.12 kW to 2.2 kW)		IS 996:2009 Cl. No: 17.3(k)	
24.	Squirrel cage induction motor for centrifugal and agricultural purpose (0.37 kW to 15 kW)	Dimension	IS 7538:1996 Cl. No.: 22.3.1(a)	0.02 mm to 1000 mm
	3-Phase Energy Efficient induction motor (0.12 kW to 45 kW)		IS 12615:2018 Cl. No. 16.2.1	

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	Submersible motor (0.37 kW to 75 kW)		IS 9283:2013 Cl. No. 7.1	
	1-Phase Induction motor (0.12 kW to 2.2 kW)		IS 996:2009 Cl. No. 17.3(n)	
25.	Regenerative self priming pump (0.18 kW to 3.7 kW)	Priming	IS 8472:1998 Cl. No.: 13.5	0.1 s to 3600 s
26.	Open well submersible pump set (0.12 kW to 45 kW)	Balancing of rotor / Balancing of Impeller	IS 14220:2018 Cl. No. 10.5	Qualitative
	Submersible pump set (0.37 kW to 75 kW)		IS 8034:2018 Cl. No. 8.5	
	Submersible motor (0.37 kW to 75 kW)		IS 9283:2013 Cl. No. 5.6	
27.	Submersible pump set (0.37 kW to 75 kW)	Constructional Details/ Constructional Features/	IS 8034:2018 Cl. No. 6.0	Qualitative
	Regenerative self priming pump (0.18 kW to 3.7 kW)	Constructional Requirements	IS 8472:1998 Cl. No.: 8	

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	Monoset pump for agricultural purpose (0.37 kW to 25 kW)		IS 9079:2018 Cl. No. 7&10	
	Openwell submersible pump set (0.12 kW to 45 kW)		IS 14220:2018 Cl. No. 7	
	Submersible motor (0.37 kW to 75 kW)		IS 9283:2013 Cl. No. 5	
	1-Phase Induction motor (0.12 kW to 2.2 kW)		IS 996:2009 Cl. No. 9	
28.	Monoset pump for agricultural purpose (0.37 kW to 25 kW)	Design features/ Guarantee of Performance	IS 9079:2018 Cl.No. 9 & 13	Qualitative
	Openwell submersible pump set (0.12 kW to 45 kW)		IS 14220:2018 Cl. No. 8	
	Submersible pump set (0.37 kW to 75 kW)		IS 8034:2018 Cl. No. 7	
29.	Submersible pump set (0.37 kW to 75 kW)	Shaft Extension / concentricity of Mounting Rabbit and Shaft / Perpendicularity of	IS 8034:2018 Cl. No. 8	0.01 to 10 mm

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	Submersible motor (0.37 kW to 75 kW)	Mounting face of flange to shaft	IS 9283:2013 Cl. No. 7.2.2	
30.	Submersible pump set (0.37 kW to 75 kW)	Voltage & Frequency variation	IS 8034:2018 Cl. No. 7.1.10	Qualitative
	Submersible motor (0.37 kW to 75 kW)		IS 9283:2013 Cl. No. 6.2	
31.	Submersible pump set (0.37 kW to 75 kW)	Surface finish test/ bearing or roughness testing	IS 8034:2018 Cl. No. 8.4.2	0 to 200 µm Ra
	Openwell submersible pump set (0.12 kW to 45 kW)		IS 14220:2018 Cl. No. 10.4.2	
	Submersible motor (0.37 kW to 75 kW)		IS 9283:2013 Cl. No. 5.5	
32.	1-Phase Induction motor (0.12 kW to 2.2 kW)	Method of Cooling	IS 996:2009 Cl. No. 11	Qualitative
	3-Phase Energy Efficient induction motor (0.12 kW to 45 kW)		IS 12615:2018 Cl. No. 6	

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33.	1-Phase Induction motor (0.12 kW to 2.2 kW)	Torques at rated voltage and frequency / Break away starting current at rated voltage and frequency / locked rotor test	IS 996:2009 / Cl. No. 17.3 (b) IS 996:2009 Cl. No. 17.3 (c)	0.01 N-m to 500 N-m 0.01 A to 150 A
34.	1-Phase Induction motor (0.12 kW to 2.2 kW)	Moisture proofness	IS 996:2009 Cl. No. 17.3 (j)	Qualitative
35.	Energy Efficient Induction Motors - Three Phase Squirrel Cage (0.12 kW to 45 kW)	Over speed test	IS 12615:2018 Cl. No. 16.3.4	1 RPM to 99999 RPM
	Squirrel Cage Induction Motor for Centrifugal and Agricultural Purpose (0.37 kW to 15 kW)		IS 7538:1996 Cl. No. 22.3 (s)	
36.	Energy Efficient Induction Motors - Three Phase Squirrel Cage (0.12 kW to 45 kW)	Testing for degree of protection (IP44 & IP2X)	IS 12615:2018 Cl. No 16.3.3 & OF IS / IEC 60034_5 Cl. No. 4, 8, 9	Qualitative
	1-Phase Induction Motor (0.12 kW to 2.2 kW)		IS 996:2009 Cl. No. 10 OF IS / IEC 60034_5 Cl. No. 4, 8, 9	



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37.	1-Phase Induction motor (0.12 kW to 2.2 kW)	Switching Operation of Centrifugal Switch at No Load	IS 996:2009 Cl. No. 9.4.6.1	Qualitative