

**TABLE 13 VALUES OF PERFORMANCE CHARACTERISTICS OF SPLIT PHASE INDUCTION MOTORS**

Rated Output	Minimum Full Load Speed	Maximum Full Load Current	Minimum Product of Efficiency and power Factor at Rated load	Maximum Break away Starting Current
W	Rev/min	A		A
(1)	(2)	(3)	(4)	(5)
12	1 325	0.65	0.08	6.5
18	1 325	0.8	0.09	8
25	1 325	1.0	0.10	10
40	1 325	1.2	0.14	12
60	1 325	1.5	0.17	15
90	1 325	2.0	0.19	20
120	1 350	2.2	0.23	22
180	1 350	2.8	0.27	28
250	1 350	3.8	0.27	38
370	1 350	6.0	0.26	60
550	1 375	7.0	0.33	70
750	1 375	10.0	0.31	100
1100	1 375	13.0	0.35	130
1500	1 375	18.0	0.35	180

(Page 8, clause 12.5.2, line 2) - Substitute "Table 13" for "Table 12")

(Page 8, clause 13.1, line 2) – Substitute "Table 14" for "Table 13".

(Page 9, clause 13.2.14) - Substitute "Table 14" for "Table 13" and renumber "Table 14" for "Table 13".

(Page 12, B-1.4) - Add the following after B-1.4:

**"B -1.5 Split-Phase"**

Owing to their high starting currents, split-phase motors are generally used for loads of low inertia and infrequent starting. When higher starting currents can be tolerated, motors of the higher torque rating can be used [type b) motors in table 16]"

**"B -1.6 Shaded-Poles**

These motors are suitable for all applications where only a very low starting torque is required and motor efficiency is not important.

Note : \* Unless otherwise specified, these motors are provided with some means of switching out or modifying the auxiliary or starting winding, for example, centrifugal switches or electromagnetic relays."

(Page 15, Annex E) - Add Seconds under column (4) and add the following in the Table below E-1 after iii)

- iv. Shaded pole 80 3
- v. Split phase 10 1



**SIEMA**

**THE SOUTHERN INDIA ENGINEERING MANUFACTURERS' ASSOCIATION**

P.B. No.3847, 8/4, Race Course, Near Thomas Park, Coimbatore 641 018.

**TECHNO 4**

**Insight**

Activities of SIEMA from 15th January 2010 to 31st January 2010

**Uzhavukkum Thozhilukkum Vanthanai Seivom**

We arranged a special lecture on "Uzhavukkum Thozhilukkum Vanthanai Seivom" by Sri Kavidasan, Director & Head –HRD, Roots Group of Companies held on 18th January 2010 at 6.00 p.m. at ND Hall, SIEMA, Coimbatore.

**Bench Marking Samples**

Sri G. Rajendran, Chairman, Pump and Motor Panel held discussions the officials of Sri K. Gunabal on 18th January 2010 about testing of International samples of Pumpsets purchased by COINDIA for benchmarking.

**Technical Committee Meeting**

Technical Committee meeting was held on 18th January 2010 and discussed about the IEC Standard on Rotating Electrical Machines – Part 1 – Guide for the selection and application of energy efficient motors including variable speed applications.

**Managing Committee Meeting**

The Seventh Managing Committee meeting was held 20th January 2010. the minutes of the meeting will be sent to all members separately.

**Republic Day Celebrations**

Office-bearers, Past President and MC members attended the flag hoisting ceremony on the eve of Republic Day on 26th January 2010 at our Association.

**Meeting on Techno 4**

Sri Jayakumar Ramdass, President, Sri T.C. Thiagarajan, Vice-President, Sri G. Rajendran, Past President, Dr. G. Ranganathan and Sri D. Balasundaram, MC Members met on 26th January 2010 at our Association and discussed about the latest developments about Techno 4 – an International Exhibition - to be held on April 2010.

**Meeting with Dy. Director, MSME**

Sri Palanivel, Deputy Director and Sri Ramakrishnan, Asst. Director met Sri Jayakumar Ramdass on 27th January 2010 at our Association and discussed about conducting a Vendor Development Programme during the month of February 2010 at our Association.

**AGM of COINDIA**

Sri Jayakumar Ramdass, President, Sri T.C. Thiagarajan, Vice-President, Past Presidents and MC members attended

the 5th Annual General Meeting of COINDIA on 27th January 2010 at ND Hall. Our Past President Sri C.R. Swamianthan was elected as President of COINDIA for the years 2009-10 and 2010-11. Sri D. Balasundaram, CPC Pvt. Ltd., and Sri N. Visvanathan, Managing Director, Ammarun Foundries were elected as Vice Presidents. Sri G. Rajendran was elected as CEO and Managing Director. Sri Jayakumar Ramdass, President offered felicitations to the newly elected office bearers.

#### Meeting at TECA

Sri Jayakumar Ramdass, President attended a meeting on 27th January 2010 organized by TECA to discuss about the present power situation and problems faced by the LT and HT consumers.

#### Technical Committee Meeting

Sri Jayakumar Ramdass, President, Sri G. Rajendran, Chairman, Pump and Motor Panel, Sri K. Gunabal, Deputy Director, Si'Tarc and Prof. R. Subramanian, co-ordinator, Technical Committee, SIEMA met on 28th January 2010 and discussed about the points to be presented to the technical committee of BEE.

#### Technical Committee Meeting of BEE

The Technical Committee Meeting of Bureau of Energy Efficiency was held on 28th January 2010 at our Association. Sri G. Rajendran, Chairman, Pump & Motor Panel Chaired the meeting. On behalf of BEE Sri Milind Raje & Sri P.K. Mukherjee attended the Technical Meeting.

#### Presentation on GI for Pumpsets.

Sri M.S. Bharath, Partner, and Ms. Gowri Tirumurti, Advocate, Anand and Anand, Chennai gave a presentation on

Geographical Indication for Pumpsets on 28th January 2010 at our Association.

#### Meeting on Techno 4

We organized a meeting of MC members on 29th January 2010 at our Association to discuss about the latest developments of Techno 4 to be held on 9th to 11th April 2010 at Coimbatore. It was decided to convene all members meeting on 8th February 2010 at our Association.

#### FORTH COMING PROGRAMMES

A session on introduction of Scheme on Lean Manufacturing by Sri Anil Bharadwaj, Secretary General, Federation of Indian Micro and Small & Medium Enterprises ( FISME), and Sri Maharajan, Deputy Director, National Productivity Council, Chennai will be held on 3rd February 2010 at our Association.

#### Techno 4

All members meet will be held on 8th February 2010 at our Association on 8th February 2010 to discuss about latest developments and future course of action about Techno 4 – an International Exhibition – to be held on 9th, 10th and 11th April 2010 at CODISSIA Trade Fair Complex.

#### Session on GST

A session on Goods and Services Tax (GST) by Sri Vaitheeswaran, Advocate, Chennai will be held on 15th February 2010 at our Association

#### Vendor Development Programme

SIEMA jointly with MSME and TACT will organize a Vendor Development Programme meet on 25th February 2010 at our Association

We are giving below a draft Amendment IS 996:2009 SINGLE PHASE a.c. INDUCTION MOTORS FOR GENERAL PURPOSE (Third Revision, received from BIS, New Delhi.

#### **BUREAU OF INDIAN STANDARDS DRAFT FOR COMMENTS ONLY**

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#### **DRAFT AMENDMENT NO 1 JANUARY 2010**

TO  
IS 996:2009 SINGLE PHASE a.c. INDUCTION MOTORS FOR GENERAL PURPOSE

(Third Revision)

Last date for receipt of comments is 30-03-2010

Cover page, Foreword b) under 2nd para) – Delete “Except for shaded pole and Split Phase Motors”.

(Para 1, clause 1.1) - Substitute the following for existing text:

“1.1 This standard covers single phase ac induction motors of the capacitor types, split phase and shaded pole types for voltage upto and including 250V and having windings with Class A, Class E, Class B, Class F, Class H insulation (see IS 1271:1985 Thermal evaluation and classification of electrical insulation and output up to and including 2200 W)”.

(Para 5, Table 1) – Add the following after (iii):

iv. Shaded pole	120	20	30
v. Split phase a)	200	125	150
b)	250	200	225

(Page 5, Table 2) - Add the following after (iii)

iv. Shaded pole	10
v. Split phase	60

(Page 8) - Add the following tables after Table 11

**TABLE 12 VALUES OF PERFORMANCE CHARACTERISTICS OF SHADE POLE MOTORS**

Rated Output	Minimum Full Load Speed	Maximum Full Load Current	Minimum Product of Efficiency and power Factor at Rated load	Maximum Break away Starting Current
W	Rev/min	A		A
(1)	(2)	(3)	(4)	(5)
2.5	1200	0.5	0.023	1.25
4.0	1200	0.6	0.035	1.5
7.0	1200	0.8	0.046	2.0
12	1200	1.1	0.058	2.75
18	1200	1.3	0.069	3.25
25	1200	1.6	0.081	4.0
40	1200	1.8	0.104	4.5
60	1200	2.2	0.127	5.5
90	1225	2.8	0.150	7.0
120	1225	3.2	0.184	8.0
180	1225	4.0	0.219	10.0
250	1225	5.0	0.242	12.5
370	1225	8.8	0.196	22.0