

# TAL Rating Table

## Low Voltage Alternators - 4 pole

General features and ratings

**LEROY-SOMER**<sup>™</sup>

***Nidec***  
All for dreams

# Summary



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# Technical definitions

## INTRODUCTION

This catalogue is a summary of ratings for the TAL low voltage range at the most common voltages around the world. For other voltages, please consult Nidec Leroy-Somer.

## 1 - NOMINAL RATING DEFINITION

### - Continuous rating S1/40°C - IEC 60034-1 definition

Running at constant load limited to the insulation class ; permissible overload 1 h every 12 hours.

### - Stand-by rating 40°C (H: 150K)

Running at constant load **without** over load, for a limited duration of maximum 500h/year, with a permissible increase of the temperature rise above class H.

### - Stand-by rating 27°C (H: 163K)

Running at constant load **without** over load, for a limited duration of maximum 500h/year, with a permissible increase of the temperature rise above class H. The lower ambient temperature (27°C) allows to increase the nominal rating.

A same machine is capable of the following operations:

example: **S1/40°C = 100 kW - std by/40°C = 105 kW - std by/27°C = 110 kW**

## 2 - INSULATION CLASS AND TEMPERATURE RISE

The windings on all Nidec Leroy-Somer alternators are protected with class H insulation system.

The tables in this document give power values for class H (125K) and F (105K) temperature rises.

For more information on insulation and temperature rise classes, please read our technical note TN11 (ref. 5202).

## 3 - DERATING

Multiply nominal rating by derating factors indicated in the following table.

Altitude (m)	1000	1500	2000	2500	3000	3500	4000
Derating factor	1	0.975	0.949	0.922	0.894	0.866	0.837

Ambient T °C	25	40	45	50	55	60 (*)
Class H	1.076	1	0.973	0.946	0.918	0.889
Class F	1.095	1	0.966	0.931	0.894	0.856
Class B	1.140	1	0.949	0.894	0.837	0.775

(\*) External AVR if  $\geq 56$  °C

Lagging PF	0.6	0.7	0.8	0.9	1
Derating factor	0.86	0.93	1	1	1

For a rated P.F. at 0.8

## 4 - WINDINGS

The windings proposed by Nidec Leroy-Somer in this document are in 2/3 pitch.

- Standard winding No.: 6S (6-wire) or 6 (12-wire)
- Winding M or M1, dedicated 1-phase winding (4-wire)

“S” after the winding number means “6 leads” ex: 6S.

“T” or “+” after winding give an information about the saturation level of the stator.

## Technical definitions

### 5 - GENERAL FEATURES

#### 5.1 - Standards

Nidec Leroy-Somer TAL alternators meet all key international standards and regulations, including IEC 60034, NEMA MG 1.32-33, ISO 8528-3, CSA C22.2 n°100-14 and UL 1446 (UL 1004 on request). Also compliant with IEC 61000-6-2, IEC 61000-6-3, IEC 61000-6-4, VDE 0875G, VDE 0875N and EN 55011, group 1 class A for European zone.

Nidec Leroy-Somer TAL alternators can be integrated in EC marked generator sets, and they bear EC, UKCA and CMIM markings. They are designed, manufactured and marketed in an ISO 9001 and ISO 14001 quality assurance environment.

#### 5.2 - Electrical features

The 4-pole TAL alternators are fitted with reliable and performant AVR's, designed and manufactured by Nidec Leroy-Somer.

The available excitation systems **SHUNT**, **AREP+** or **PMG** depend on selected alternator and are indicated in nominal rating tables.

		Alternators		TAL 040	TAL 042	TAL 044	TAL 046	TAL 0473	TAL 049
AVRs	3-phase 6-wire	SHUNT	Standard	R120	R120	R120	R150	R150	R150
			Option remote voltage potentiometer	R150	R150	R150			
			Option UL	D350	D350	D350	D350	D350	D350
		AREP+/PMG	Standard	R180*	R180	R180	R180	R180	R180
			Option UL	D350*	D350	D350	D350	D350	D350
	3-phase 12-wire	SHUNT	Standard	R120	R120	R120	R150	R150	R150
			Option remote voltage potentiometer or/and UL	R220	R220	R250	R250	R250	R250
			Option UL	D350*	D350	D350	D350	D350	D350
		AREP+/PMG	Standard	R180*	R180	R180	R180	R180	R180
			Option UL	D350*	D350	D350	D350	D350	D350
Dedicated 1-phase 4-wire	SHUNT	Standard	R121	R121	R121	-	-	-	
		Option UL	R221	R221	R251	-	-	-	

\*AREP+ only

#### - Frequency

TAL alternators may operate either 50 or 60 Hz.

#### - Power factor: P.F.

TAL alternators are designed to operate between 0.8 and 1 power factor.

#### - Waveform

Total harmonic distortion (THD), at no load or linear load is less than 5% according to IEC.

TIF/Telephone influence factor according to NEMA is less than 50.

#### - Transient features

Transient voltage dip for rated step load at 0.8 power factor is less than 18 %.

Recovery time for a 20 % transient voltage dip is less than 0.5 s.

#### - Parallel operation

TAL 044, TAL 046, TAL 0473 and TAL 049 alternators can operate in parallel with other alternators with AREP+ or PMG.

#### - Overload acceptance

TAL alternators can be overloaded according to NEMA.

#### - 1-phase operation

TAL 040, TAL 042 and TAL 044 alternators can be supplied with a dedicated 1-phase winding (code M or M1).

# Technical definitions

## 5.3 - Mechanical features

### - Forms

TAL alternators are provided in single bearing configuration. A large range of engine adaptors and coupling discs are available to fit the major engines.

### - Enclosure

Standard enclosure is IP 23.

### - Bearings

Sealed for life bearings.

### - Balancing

All the rotors are dynamically balanced according to ISO 1940 and IEC 60034-14.

### - Direction of rotation

TAL alternators can operate in both directions (5% derating for anticlockwise running for TAL 0473 and TAL 049).

### - Overspeed

The maximum overspeed is 2250 R.P.M. (1.25 times the 60 Hz rated speed).

### - Insulation and protection

TAL alternators are class H insulated. The standard winding protection can accept up to 95 % relative humidity

### - Terminal box and connectors

TAL alternators are fitted with a terminal box which facilitates access to the AVR and allows easy access to the connections. Current transformers and other optional modules can be fitted within the terminal box.

### - Mechanical structure

Steel frame. Aluminium or cast iron housings and flanges depending on models.

## 6 - ACCESSORIES AND OPTIONS

- AVR

- Customized painting (unpainted machine as standard)

- Current transformers for paralleling with TAL 044, TAL 046, TAL 0473 and TAL 049

- EMI suppression module

- Specific protections for harsh environments

- Derating table for system 2-4:

Type	50 Hz			60 Hz
	380V	400V	415V	All voltages
TAL 040	1	1	1	1
TAL 042	0.97	1 except 0.97 for TAL 042 G	1 except 0.97 for TAL 042 G	1 except 0.97 for TAL 042 G
TAL 044	1 except 0.97 for TAL 044 K	1 except 0.97 for TAL 044 K	1 except 0.97 for TAL 044 K	1 except 0.97 for TAL 044 K
TAL 046	1 except 0.97 for TAL 046 H	1 except 0.97 for TAL 046 H	1 except 0.97 for TAL 046 H	1 except 0.97 for TAL 046 H
TAL 0473	1 except 0.95 for TAL 0473 A, D & F	1 except 0.95 for TAL 0473 D & F	1 except 0.95 for TAL 0473 D & F	1 except 0.95 for TAL 0473 D & F
TAL 049	1	1	1	1

## 7 - PRODUCT DESCRIPTION

The machine name is defined according to various criteria (see below).

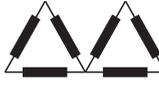
Example of description for:

### TAL 044 A M6S/4

- TAL: Range
- 044: Frame size
- A: Core length
- M: Excitation system (M, or L wind.9: AREP+ / J: SHUNT or SHUNT + PMG)
- 6S/4: Winding number / number of poles

# Voltage reconnections

## 8 - RECONNECTIONS 50 Hz

4-POLE - 1500 R.P.M.							
Phase - Code	3-phase - D	3-phase - F	3-phase - D	3-phase - F	3-phase - A	1-phase - F	1-phase - FF
Connections							
	Star	Delta	Star	Delta	Parallel Star	Delta	Double Delta
Number of wire	6	6	12	12	12	6	12
Winding 6S or 6 standard	380-400-415 V (page 7)	220 - 240 V (page 7)	380-400-415 V (page 7)	220 - 240 V (page 7)	190 - 208 V (page 7)	220 - 240 V (page 10)	220 - 240 V (page 10)
Winding 6S or 6 standard	440 V (page 8)	-	440 V (page 8)	-	220 V (page 8)	-	-
Winding 9S or 9 specific (on request)	500 - 525 V (page 9)	-	500 - 525 V (page 9)	-	-	-	-
Winding M specific, dedicated 1-phase 4-wire			 <b>220 - 240 V</b> (page 11) SE (serie)		 <b>110 - 120 V</b> (page 11) PA (parallel)		

# 50 Hz - 3-phase

1500 R.P.M. - P.F. 0.8

 Star (6 or 12-wire)	 Parallel Star (12-wire only)	 Delta (6 or 12-wire)
<b>380 - 400 - 415 V</b>	<b>190 - 200 - 208 V</b>	<b>220 - 230 - 240 V</b>

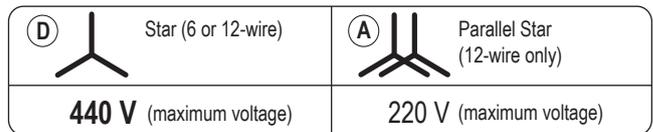
## 8.1 - Winding 6S or 6 standard

Excitation					kVA @ 190V, 220V, 380V				kVA @ 200V, 230V, 400V				kVA @ 208V, 240V, 415V			
					40 °C cont.		40 °C St.by	27 °C St.by	40 °C cont.		40 °C St.by	27 °C St.by	40 °C cont.		40 °C St.by	27 °C St.by
TYPE	SHUNT	AREP+	PMG	wires	H: 125 K	F: 105 K	H: 150 K	H: 163 K	H: 125 K	F: 105 K	H: 150 K	H: 163 K	H: 125 K	F: 105 K	H: 150 K	H: 163 K
TAL 040 B	J6S/4	M6S/4	-	6/12	10	9	10.5	11	10	9	10.5	11	10	9	10.5	11
TAL 040 C	J6S/4	M6S/4	-	6/12	12.5	11.5	13.5	14	12.5	11.5	13.5	14	12.5	11.5	13.5	14
TAL 040 D	J6S/4	M6S/4	-	6/12	15	14	16	16.5	15	14	16	16.5	15	14	16	16.5
TAL 040 E	J6S/4	M6S/4	-	6/12	17.5	16	18.5	19.5	17.5	16	18.5	19.5	17.5	16	18.5	19.5
TAL 040 F	J6S/4	M6S/4	-	6/12	20	18	21	22	20	18	21	22	20	18	21	22
TAL 042 A	J6S/4	M6S/4	option	6/12	25	23	26.5	27.5	25	23	26.5	27.5	25	23	26.5	27.5
TAL 042 B	J6S/4	M6S/4	option	6/12	27	24.5	28.5	30	27	24.5	28.5	30	27	24.5	28.5	30
TAL 042 C	J6S/4	M6S/4	option	6/12	31	28	33	34	32	29	34	35	32	29	34	35
TAL 042 D	J6S/4	M6S/4	option	6/12	35	32	37	38.5	35	32	37	38.5	35	32	37	38.5
TAL 042 E	J6S/4	M6S/4	option	6/12	39.5	36	42	43.5	40	36.5	42.5	45	40	36.5	42.5	45
TAL 042 F	J6S/4	M6S/4	option	6/12	43	39	45.5	47.5	45	41	47.5	50	45	41	47.5	50
TAL 042 G	J6S/4	M6S/4	option	6/12	47.5	43	50	52	50	45.5	53	55	50	45.5	53	55
TAL 042 H	J6S/4	M6S/4	option	6/12	58	53	61	64	60	55	64	66	60	55	64	66
TAL 044 A*	J6S/4	M6S/4	option	6/12	70	64	74	77	70	64	74	77	70	64	74	77
TAL 044 B*	J6S/4	M6S/4	option	6/12	80	73	85	88	80	73	85	88	80	73	85	88
TAL 044 C	J6S/4	M6S/4	option	6/12	90	82	95	100	90	82	95	100	90	82	95	100
TAL 044 D	J6S/4	M6S/4	option	6/12	100	91	106	110	100	91	106	110	100	91	106	110
TAL 044 E*	J6S/4	M6S/4	option	6/12	125	114	133	138	125	114	133	138	125	114	133	138
TAL 044 H*	J6S/4	M6S/4	option	6/12	135	123	143	150	135	123	143	150	135	123	143	150
TAL 044 J	J6S/4	M6S/4	option	6/12	150	137	159	165	150	137	159	165	150	137	159	165
TAL 044 K*	J6S/4	M6S/4	option	6/12	165	150	175	182	165	150	175	182	165	150	175	182
TAL 044 L	J6S/4	M6S/4	option	6/12	180	164	191	200	180	164	191	200	180	164	191	200
TAL 044 M	J6S/4	M6S/4	option	6/12	192	175	204	211	200	182	212	220	200	182	212	220
TAL 046 C*	J6S/4	M6S/4	option	6/12	230	209	244	253	230	209	244	253	230	209	244	253
TAL 046 D*	J6S/4	M6S/4	option	6/12	240	218	254	264	250	228	265	275	250	228	265	275
TAL 046 E*	J6S/4	M6S/4	option	6/12	275	250	292	303	275	250	292	303	275	250	292	303
TAL 046 F*	J6S/4	M6S/4	option	6/12	290	264	307	319	300	273	318	330	300	273	318	330
TAL 046 G	J6S/4	M6S/4	option	6/12	325	296	345	360	325	296	345	360	325	296	345	360
TAL 046 H	J6S/4	M6S/4	option	6/12	350	318	371	385	365	332	387	400	365	332	387	400
TAL 0473 A	J6S/4	M6S/4	option	6/12	390	355	413	429	410	375	435	450	410	375	435	450
TAL 0473 B	J6S/4	M6S/4	option	6/12	455	415	480	500	455	415	480	500	455	415	480	500
TAL 0473 C	J6S/4	M6S/4	option	6/12	500	455	530	550	500	455	530	550	500	455	530	550
TAL 0473 D	J6S/4	M6S/4	option	6/12	525	478	557	578	550	500	585	600	550	500	585	600
TAL 0473 E*	J6S/4	M6S/4	option	6/12	600	545	635	660	600	545	635	660	600	545	635	660
TAL 0473 F*	J6S/4	M6S/4	option	6/12	645	587	684	710	660	600	700	730	660	600	700	730
TAL 049 B	J6S/4	M6S/4	option	6/12	730	665	775	805	730	665	775	805	730	665	775	805
TAL 049 C	J6S/4	M6S/4	option	6/12	820	745	870	910	820	745	870	910	820	745	870	910
TAL 049 D	J6S/4	M6S/4	option	6/12	910	830	965	1010	910	830	965	1010	910	830	965	1010
TAL 049 E	J6S/4	M6S/4	option	6/12	1000	910	1060	1100	1000	910	1060	1100	1000	910	1060	1100

\* 6-wire only for paralleling.

# 50 Hz - 3-phase

1500 R.P.M. - P.F. 0.8



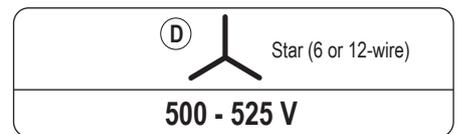
## 8.2 - Winding 6S or 6 standard

Excitation					kVA @ 220V, 440V			
					40 °C cont.		40 °C St.by	27 °C St.by
TYPE	SHUNT	AREP+	PMG	wires	H : 125 K	F : 105 K	H : 150 K	H : 163 K
TAL 040 B	J6S/4	M6S/4	-	6/12	9	8	9.5	10
TAL 040 C	J6S/4	M6S/4	-	6/12	11	10	11.5	12
TAL 040 D	J6S/4	M6S/4	-	6/12	13	12	14	14.5
TAL 040 E	J6S/4	M6S/4	-	6/12	16	14.5	17	17.5
TAL 040 F	J6S/4	M6S/4	-	6/12	18	16.5	19	20
TAL 042 A	J6S/4	M6S/4	option	6/12	24.5	22.5	26	27
TAL 042 B	J6S/4	M6S/4	option	6/12	26	23.5	27.5	28.5
TAL 042 C	J6S/4	M6S/4	option	6/12	30	27.5	32	33
TAL 042 D	J6S/4	M6S/4	option	6/12	30.5	28	32.5	33.5
TAL 042 E	J6S/4	M6S/4	option	6/12	35	32	37	38.5
TAL 042 F	J6S/4	M6S/4	option	6/12	39	35.5	41.5	43
TAL 042 G	J6S/4	M6S/4	option	6/12	43	39	45.5	47.5
TAL 042 H	J6S/4	M6S/4	option	6/12	52	47	55	57
TAL 044 A*	J6S/4	M6S/4	option	6/12	63	57	67	69
TAL 044 B*	J6S/4	M6S/4	option	6/12	72	66	76	79
TAL 044 C	J6S/4	M6S/4	option	6/12	81	74	86	89
TAL 044 D	J6S/4	M6S/4	option	6/12	90	82	95	99
TAL 044 E*	J6S/4	M6S/4	option	6/12	113	103	120	124
TAL 044 H*	J6S/4	M6S/4	option	6/12	122	111	129	134
TAL 044 J	J6S/4	M6S/4	option	6/12	135	123	143	149
TAL 044 K*	J6S/4	M6S/4	option	6/12	138	126	150	157
TAL 044 L	J6S/4	M6S/4	option	6/12	171	156	181	188
TAL 044 M	J6S/4	M6S/4	option	6/12	192	175	204	211
TAL 046 C*	J6S/4	M6S/4	option	6/12	219	199	232	241
TAL 046 D*	J6S/4	M6S/4	option	6/12	238	217	252	262
TAL 046 E*	J6S/4	M6S/4	option	6/12	261	238	277	287
TAL 046 F*	J6S/4	M6S/4	option	6/12	285	259	302	314
TAL 046 G	J6S/4	M6S/4	option	6/12	309	281	328	340
TAL 046 H	J6S/4	M6S/4	option	6/12	347	316	368	382
TAL 0473 A	J6S/4	M6S/4	option	6/12	400	364	424	440
TAL 0473 B	J6S/4	M6S/4	option	6/12	445	405	472	490
TAL 0473 C	J6S/4	M6S/4	option	6/12	455	414	482	500
TAL 0473 D	J6S/4	M6S/4	option	6/12	540	491	572	594
TAL 0473 E*	J6S/4	M6S/4	option	6/12	500	455	530	550
TAL 0473 F*	J6S/4	M6S/4	option	6/12	630	573	668	693
TAL 049 B	J6S/4	M6S/4	option	6/12	665	605	705	730
TAL 049 C	J6S/4	M6S/4	option	6/12	810	735	860	890
TAL 049 D	J6S/4	M6S/4	option	6/12	820	745	870	900
TAL 049 E	J6S/4	M6S/4	option	6/12	950	865	1005	1045

\* 6-wire only for paralleling.

# 50 Hz - 3-phase

## 1500 R.P.M. - P.F. 0.8



### 8.3 - Winding 9S or 9 specific

Excitation					kVA @ 500V				kVA @ 525V			
					40 °C cont.		40 °C St.by	27 °C St.by	40 °C cont.		40 °C St.by	27 °C St.by
TYPE	SHUNT	AREP+	PMG	wires	H: 125 K	F: 105 K	H: 150 K	H: 163 K	H: 125 K	F: 105 K	H: 150 K	H: 163 K
TAL 040 B	-	L9S/4	-	6/12	10	9	10.5	11	10	9	10.5	11
TAL 040 C	-	L9S/4	-	6/12	12.5	11.5	13.5	14	12.5	11.5	13.5	14
TAL 040 D	-	L9S/4	-	6/12	15	13.5	16	16.5	15	13.5	16	16.5
TAL 040 E	-	L9S/4	-	6/12	17.5	16	18.5	19.5	17.5	16	18.5	19.5
TAL 040 F	-	L9S/4	-	6/12	20	18	21	22	20	18	21	22
TAL 042 A	-	L9S/4	option	6/12	25	23	26.5	27.5	25	23	26.5	27.5
TAL 042 B	-	L9S/4	option	6/12	27	24.5	28.5	29.5	27	24.5	28.5	29.5
TAL 042 C	-	L9S/4	option	6/12	32	29	34	35	32	29	34	35
TAL 042 D	-	L9S/4	option	6/12	35	32	37	38.5	35	32	37	38.5
TAL 042 E	-	L9S/4	option	6/12	40	36.5	42.5	44	40	36.5	42.5	44
TAL 042 F	-	L9S/4	option	6/12	45	41	47.5	49.5	45	41	47.5	49.5
TAL 042 G	-	L9S/4	option	6/12	50	45.5	53	55	48.5	44	51	53
TAL 042 H	-	L9S/4	option	6/12	59	54	63	65	60	55	64	66
TAL 044 A*	-	L9S/4	option	6/12	70	64	74	77	50	45.5	53	55
TAL 044 B*	-	L9S/4	option	6/12	75	68	80	83	59	54	63	65
TAL 044 C*	-	L9S/4	option	6/12	90	82	95	99	70	64	74	77
TAL 044 D*	-	L9S/4	option	6/12	100	91	106	110	91	83	96	100
TAL 044 E*	-	L9S/4	option	6/12	125	114	133	138	105	96	111	116
TAL 044 H*	-	L9S/4	option	6/12	135	123	143	149	123	112	130	135
TAL 044 J	-	L9S/4	option	6/12	150	137	159	165	143	130	152	157
TAL 044 K*	-	L9S/4	option	6/12	165	150	175	182	161	147	171	177
TAL 044 L	-	L9+S/4	option	6/12	180	164	191	198	180	164	191	198
TAL 044 M	-	L9+S/4	option	6/12	185	168	196	204	196	178	208	216
TAL 046 C*	-	L9S/4	option	6/12	230	209	244	253	230	209	244	253
TAL 046 D*	-	L9S/4	option	6/12	242	220	257	266	250	228	265	275
TAL 046 E	-	L9S/4	option	6/12	275	250	292	303	260	237	276	286
TAL 046 F	-	L9S/4	option	6/12	300	273	318	330	274	249	290	301
TAL 046 G*	-	L9S/4	option	6/12	325	296	345	358	325	296	345	358
TAL 046 H*	-	L9S/4	option	6/12	365	332	387	402	365	332	387	402
TAL 0473 A		L9+S/4	option	6/12	393	358	417	432	410	373	435	451
TAL 0473 B*	-	L9S/4	option	6/12	455	414	482	501	455	414	482	501
TAL 0473 C*	-	L9S/4	option	6/12	500	455	530	550	500	455	530	550
TAL 0473 D*	-	L9S/4	option	6/12	539	490	571	593	550	501	583	605
TAL 0473 E	-	L9+S/4	option	6/12	600	546	636	660	600	546	636	660
TAL 0473 F	-	L9+S/4	option	6/12	625	569	663	688	660	601	700	726
TAL 049 B**	-	L9S/4	option	6	730	664	774	803	710	646	753	781
TAL 049 C**	-	L9S/4	option	6	820	746	869	902	820	746	869	902
TAL 049 D**	-	L9S/4	option	6	910	828	965	1001	910	828	965	1001
TAL 049 E**	-	L9S/4	option	6	935	851	991	1029	1000	910	1060	1100

\* 6-wire only for paralleling.

\*\* For alternators paralleling, contact us.

50 Hz - 1-phase

1500 R.P.M. - P.F. 0.8

 Delta (6-wire only)	 Double Delta (12-wire only)
220 - 240 V	

8.4 - Winding 6S or 6 standard

Excitation					kVA @ 220V - 240V			
TYPE	SHUNT	AREP+	PMG	wires	40 °C cont.		40 °C St.by	27 °C St.by
					H : 125 K	F : 105 K	H : 150 K	H : 163 K
TAL 040 B	J6/4	M6/4	-	6/12	7	6.5	7.5	7.5
TAL 040 C	J6/4	M6/4	-	6/12	9	8	9.5	10
TAL 040 D	J6/4	M6/4	-	6/12	10.5	9.5	11	11.5
TAL 040 E	J6/4	M6/4	-	6/12	12.5	11.5	13.5	14
TAL 040 F	J6/4	M6/4	-	6/12	14	13	15	15.5
TAL 042 A	J6/4	M6/4	option	6/12	15	13.5	16	16.5
TAL 042 B	J6/4	M6/4	option	6/12	16	14.5	17	17.5
TAL 042 C	J6/4	M6/4	option	6/12	19	17.5	20	21
TAL 042 D	J6/4	M6/4	option	6/12	22	20	23.5	24
TAL 042 E	J6/4	M6/4	option	6/12	25	23	26.5	27.5
TAL 042 F	J6/4	M6/4	option	6/12	27	24.5	28.5	29.5
TAL 042 G	J6/4	M6/4	option	6/12	30	27.5	32	33
TAL 042 H	J6/4	M6/4	option	6/12	36	33	38	39.5
TAL 044 A	J6/4	M6/4	option	6/12	42	38	45	46
TAL 044 B	J6/4	M6/4	option	6/12	48	44	51	53
TAL 044 C	J6/4	M6/4	option	6/12	54	49	57	59
TAL 044 D	J6/4	M6/4	option	6/12	60	55	64	66
TAL 044 E	J6/4	M6/4	option	6/12	67	61	71	74
TAL 044 H	J6/4	M6/4	option	6/12	73	66	77	80
TAL 044 J	J6/4	M6/4	option	6/12	80	73	85	88
TAL 044 K	J6/4	M6/4	option	6/12	88	80	93	97
TAL 044 L	J6/4	M6/4	option	6/12	90	82	95	99
TAL 044 M	J6/4	M6/4	option	6/12	100	91	106	110
TAL 046 C	J6/4	M6/4	option	6/12	138	126	146	152
TAL 046 D	J6/4	M6/4	option	6/12	150	137	159	165
TAL 046 E	J6/4	M6/4	option	6/12	165	150	175	182
TAL 046 F	J6/4	M6/4	option	6/12	180	164	191	198
TAL 046 G	J6/4	M6/4	option	6/12	195	177	207	215
TAL 046 H	J6/4	M6/4	option	6/12	210	191	223	231

# 50 Hz - Dedicated 1-phase

1500 R.P.M. - P.F. 1

 SE serie (4-wire)	 PA parallel (*) (4-wire)
<b>220 - 240 V</b>	<b>110 - 120 V</b>

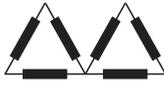
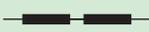
(\*) TAL 044 not possible

8.5 - Dedicated winding M					kVA @ 110V - 120V, 220V - 240V			
Excitation					40 °C cont.		40 °C St.by	27 °C St.by
TYPE	SHUNT	AREP+	PMG	wires	H : 125 K	F : 105 K	H : 150 K	H : 163 K
TAL 040 C	JM/4	-	-	4	10.5	9.5	11	11.5
TAL 040 C1	JM/4	-	-	4	12	11	12.5	13
TAL 040 D	JM/4	-	-	4	13	12	14	14.5
TAL 040 E	JM/4	-	-	4	14.5	13	15.5	16
TAL 040 F	JM/4	-	-	4	16	14.5	17	17.5
TAL 042 A	JM/4	-	-	4	18	16.5	19	20
TAL 042 B	JM/4	-	-	4	20.5	18.5	21.5	22.5
TAL 042 C	JM/4	-	-	4	22.5	20.5	24	25
TAL 042 D	JM/4	-	-	4	25	23	26.5	27.5
TAL 042 E	JM/4	-	-	4	28	25.5	29.5	31
TAL 042 F	JM/4	-	-	4	31.5	28.5	33.5	34.5
TAL 042 G	JM/4	-	-	4	35	32	37	38.5
TAL 042 H	JM/4	-	-	4	42	38	44.5	46
TAL 044 C	JM/4	-	-	4	57	52	60	63
TAL 044 D1	JM/4	-	-	4	69	63	73	76
TAL 044 E	-	-	-	4	-	-	-	-
TAL 044 J	JM/4	-	-	4	82	75	87	90
TAL 044 K	-	-	-	4	-	-	-	-

For P.F. 0.8: derating 15%

# Voltage reconnections

## 9 - RECONNECTIONS 60 Hz

4-POLE - 1800 R.P.M.							
Phase - Code	3-phase - D	3-phase - F	3-phase - D	3-phase - F	3-phase - A	1-phase - F	1-phase - FF
Connections							
	Star	Delta	Star	Delta	Parallel Star	Delta	Double Delta
Number of wire	6	6	12	12	12	6	12
Winding 6S or 6 standard	380 - 480 V (pages 13 et 14)	220 - 277 V (pages 13 et 14)	380 - 480 V (pages 13 et 14)	220 - 277 V (pages 13 et 14)	190 - 240 V (pages 13 et 14)	220 - 240 V (page 17)	220 - 240 V (page 17)
Winding 8S or 8 specific (on request)	380 - 416 V (page 15)	220 - 240 V (page 15)	380 - 416 V (page 15)	220 - 240 V (page 15)	190 - 208 V (page 15)	220 - 240 V (consult factory)	220 - 240 V (consult factory)
Winding 9S or 9 specific (on request)	600 V (page 16)	347 V (page 16)	600 V (page 16)	347 V (page 16)	-	-	-
Winding M or M1 specific, dedicated 1-phase 4-wire		 <b>230 - 240 V</b> (page 18)		 <b>115 - 120 V</b> (page 18)			

# 60 Hz - 3-phase

1800 R.P.M. - P.F. 0.8

 Star (6 or 12-wire)	 Parallel Star (12-wire only)	 Delta (6 or 12-wire)
<b>380 - 416 V</b>	<b>190 - 208 V</b>	<b>220 - 240 V</b>

## 9.1 - Winding 6S or 6 standard

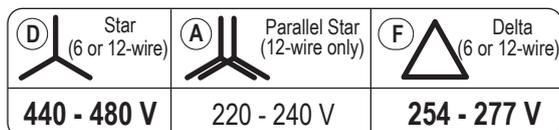
Excitation					kVA @ 190V, 220V, 380V <sup>(1)</sup>				kVA @ 208V, 240V, 416V <sup>(1)</sup>			
					40 °C cont.		40 °C St.by	27 °C St.by	40 °C cont.		40 °C St.by	27 °C St.by
TYPE	SHUNT	AREP+	PMG	wires	H: 125 K	F: 105 K	H: 150 K	H: 163 K	H: 125 K	F: 105 K	H: 150 K	H: 163 K
TAL 040 B	J6S/4	M6S/4	-	6/12	10	9	10.5	11	11	10	11.5	12
TAL 040 C	J6S/4	M6S/4	-	6/12	12.5	11.5	13.5	14	13.5	12.5	14.5	15
TAL 040 D	J6S/4	M6S/4	-	6/12	15	13.5	16	16.5	16.5	15	17.5	18
TAL 040 E	J6S/4	M6S/4	-	6/12	17.5	16	18.5	19.5	19	17.5	20	21
TAL 040 F	J6S/4	M6S/4	-	6/12	20	18	21	22	22	20	23.5	24
TAL 042 A	J6S/4	M6S/4	option	6/12	29	26.5	30.5	32	31.5	28.5	33.5	34.5
TAL 042 B	J6S/4	M6S/4	option	6/12	30	27.5	32	33	32	29	34	35
TAL 042 C	J6S/4	M6S/4	option	6/12	33.5	30.5	35.5	37	37	33.5	39	40.5
TAL 042 D	J6S/4	M6S/4	option	6/12	37.5	34	40	41.5	40.5	37	43	44.5
TAL 042 E	J6S/4	M6S/4	option	6/12	41.5	38	44	45.5	45.5	41.5	48	50
TAL 042 F	J6S/4	M6S/4	option	6/12	44	40	46.5	48.5	48	43.5	51	53
TAL 042 G	J6S/4	M6S/4	option	6/12	49	44.5	52	54	53.5	48.5	57	59
TAL 042 H	J6S/4	M6S/4	option	6/12	57	52	60	62.5	65	59	69	72
TAL 044 A*	J6S/4	M6S/4	option	6/12	69	63	73	76	76	69	81	84
TAL 044 B*	J6S/4	M6S/4	option	6/12	79	72	84	87	87	79	92	96
TAL 044 C	J6S/4	M6S/4	option	6/12	89	81	94	98	98	89	104	108
TAL 044 D	J6S/4	M6S/4	option	6/12	99	90	105	109	108	98	114	119
TAL 044 E*	J6S/4	M6S/4	option	6/12	124	113	131	136	135	123	143	149
TAL 044 H*	J6S/4	M6S/4	option	6/12	134	122	142	147	146	133	155	161
TAL 044 J	J6S/4	M6S/4	option	6/12	148	135	157	163	163	148	173	179
TAL 044 K*	J6S/4	M6S/4	option	6/12	165	150	175	182	179	163	190	197
TAL 044 L	J6S/4	M6S/4	option	6/12	180	164	191	200	195	177	207	215
TAL 044 M	J6S/4	M6S/4	option	6/12	200	182	212	220	215	196	228	237
TAL 046 C*	J6S/4	M6S/4	option	6/12	226	206	240	250	250	228	265	275
TAL 046 D*	J6S/4	M6S/4	option	6/12	245	223	260	270	265	241	281	292
TAL 046 E*	J6S/4	M6S/4	option	6/12	275	250	292	303	300	273	318	330
TAL 046 F*	J6S/4	M6S/4	option	6/12	290	264	307	320	315	287	334	347
TAL 046 G	J6S/4	M6S/4	option	6/12	315	287	334	347	345	314	366	380
TAL 046 H	J6S/4	M6S/4	option	6/12	345	314	366	380	375	341	398	413
TAL 0473 A	J6S/4	M6S/4	option	6/12	450	410	475	495	480	435	510	530
TAL 0473 B	J6S/4	M6S/4	option	6/12	475	430	505	525	510	465	540	560
TAL 0473 C	J6S/4	M6S/4	option	6/12	520	475	550	570	555	505	590	610
TAL 0473 D	J6S/4	M6S/4	option	6/12	560	510	595	615	610	555	645	670
TAL 0473 E*	J6S/4	M6S/4	option	6/12	600	545	635	660	660	600	700	725
TAL 0473 F*	J6S/4	M6S/4	option	6/12	650	590	690	720	715	650	760	785
TAL 049 B	J6S/4	M6S/4	option	6/12	725	660	770	800	795	725	845	875
TAL 049 C	J6S/4	M6S/4	option	6/12	815	740	865	895	890	810	945	980
TAL 049 D	J6S/4	M6S/4	option	6/12	905	825	960	1000	990	900	1050	1090
TAL 049 E	J6S/4	M6S/4	option	6/12	990	900	1050	1089	1083	985	1150	1192

(1) Use winding 8 for parallel operation

\* 6-wire only for paralleling.

# 60 Hz - 3-phase

1800 R.P.M. - P.F. 0.8



## 9.2 - Winding 6S or 6 standard

Excitation					kVA @ 220V, 254V, 440V				kVA @ 240V, 277V, 480V			
					40 °C cont.		40 °C St.by	27 °C St.by	40 °C cont.		40 °C St.by	27 °C St.by
TYPE	SHUNT	AREP+	PMG	wires	H: 125 K	F: 105 K	H: 150 K	H: 163 K	H: 125 K	F: 105 K	H: 150 K	H: 163 K
TAL 040 B	J6S/4	M6S/4	-	6/12	11.5	10.5	12	12.5	12.5	11.5	13.5	14
TAL 040 C	J6S/4	M6S/4	-	6/12	14.5	13	15.5	16	15.5	14	16.5	17
TAL 040 D	J6S/4	M6S/4	-	6/12	17.5	16	18.5	19.5	19	17.5	20	21
TAL 040 E	J6S/4	M6S/4	-	6/12	20	18	21	22	22	20	23.5	24
TAL 040 F	J6S/4	M6S/4	-	6/12	23	21	24.5	25.5	25	23	26.5	27.5
TAL 042 A	J6S/4	M6S/4	option	6/12	31.5	28.5	33.5	34.5	31.5	28.5	33.5	34.5
TAL 042 B	J6S/4	M6S/4	option	6/12	34	31	36	37.5	34	31	36	37.5
TAL 042 C	J6S/4	M6S/4	option	6/12	39	35.5	41.5	43	40	36.5	42.5	44
TAL 042 D	J6S/4	M6S/4	option	6/12	43	39	45.5	47.5	44	40	46.5	48.5
TAL 042 E	J6S/4	M6S/4	option	6/12	48.5	44	51	53.5	50	45.5	53	55
TAL 042 F	J6S/4	M6S/4	option	6/12	51	46.5	54	56	56.5	51	60	62
TAL 042 G	J6S/4	M6S/4	option	6/12	56.5	51	60	62	62.5	57	66.5	69
TAL 042 H	J6S/4	M6S/4	option	6/12	66.5	61	70	73	75	68	80	82.5
TAL 044 A*	J6S/4	M6S/4	option	6/12	80	73	85	88	88	80	93	97
TAL 044 B*	J6S/4	M6S/4	option	6/12	92	84	98	101	100	91	106	110
TAL 044 C	J6S/4	M6S/4	option	6/12	103	94	109	113	113	103	120	124
TAL 044 D	J6S/4	M6S/4	option	6/12	115	105	122	127	125	114	133	138
TAL 044 E*	J6S/4	M6S/4	option	6/12	143	130	152	157	156	142	165	172
TAL 044 H*	J6S/4	M6S/4	option	6/12	155	141	164	171	169	154	179	186
TAL 044 J	J6S/4	M6S/4	option	6/12	172	157	182	189	188	171	199	207
TAL 044 K*	J6S/4	M6S/4	option	6/12	189	172	200	208	206	187	218	227
TAL 044 L	J6S/4	M6S/4	option	6/12	210	191	223	231	225	205	239	250
TAL 044 M	J6S/4	M6S/4	option	6/12	230	209	244	253	250	228	265	275
TAL 046 C*	J6S/4	M6S/4	option	6/12	262	238	278	288	288	262	305	316
TAL 046 D*	J6S/4	M6S/4	option	6/12	280	255	297	308	313	285	332	344
TAL 046 E*	J6S/4	M6S/4	option	6/12	315	287	334	347	344	313	365	378
TAL 046 F*	J6S/4	M6S/4	option	6/12	340	309	360	374	360	328	382	400
TAL 046 G	J6S/4	M6S/4	option	6/12	365	332	387	402	406	369	430	447
TAL 046 H	J6S/4	M6S/4	option	6/12	400	364	424	440	438	399	464	480
TAL 0473 A	J6S/4	M6S/4	option	6/12	500	455	530	550	510	465	540	560
TAL 0473 B	J6S/4	M6S/4	option	6/12	530	480	560	585	570	520	605	625
TAL 0473 C	J6S/4	M6S/4	option	6/12	590	535	625	650	625	570	665	690
TAL 0473 D	J6S/4	M6S/4	option	6/12	630	575	670	695	690	630	730	750
TAL 0473 E*	J6S/4	M6S/4	option	6/12	685	625	725	755	750	685	795	825
TAL 0473 F*	J6S/4	M6S/4	option	6/12	755	685	800	830	825	750	875	910
TAL 049 B	J6S/4	M6S/4	option	6/12	840	765	890	925	915	835	970	1005
TAL 049 C	J6S/4	M6S/4	option	6/12	940	855	995	1040	1025	935	1085	1130
TAL 049 D	J6S/4	M6S/4	option	6/12	1045	950	1110	1155	1140	1035	1210	1255
TAL 049 E	J6S/4	M6S/4	option	6/12	1146	1045	1215	1260	1250	1140	1325	1375

\* 6-wire only for paralleling.

# 60 Hz - 3-phase

1800 R.P.M. - P.F. 0.8

 Star (6 or 12-wire)	 Parallel Star (12-wire only)	 Delta (6 or 12-wire)
<b>380 - 416 V</b>	<b>190 - 208 V</b>	<b>220 - 240 V</b>

## 9.3 - Winding 8S or 8 specific

Excitation					kVA @ 190V, 220V, 380V				kVA @ 208V, 240V, 416V			
					40 °C cont.		40 °C St.by	27 °C St.by	40 °C cont.		40 °C St.by	27 °C St.by
TYPE	SHUNT	AREP+	PMG	wires	H: 125 K	F: 105 K	H: 150 K	H: 163 K	H: 125 K	F: 105 K	H: 150 K	H: 163 K
TAL 040 B	J8S/4	M8S/4	-	6/12	11.5	10.5	12	12.5	12.5	11.5	13.5	14
TAL 040 C	J8S/4	M8S/4	-	6/12	14.5	13	15.5	16	15.5	14	16.5	17
TAL 040 D**	J8S/4	M8S/4	-	6/12	17.5	16	18.5	19.5	19	17.5	20	21
TAL 040 E	J8S/4	M8S/4	-	6/12	20	18	21	22	22	20	23.5	24
TAL 040 F	J8S/4	M8S/4	-	6/12	23	21	24.5	25.5	25	23	26.5	27.5
TAL 042 A	J8S/4	M8S/4	option	6/12	29	26.5	30.5	32	31.5	28.5	33.5	34.5
TAL 042 B	J8S/4	M8S/4	option	6/12	31	28	33	34	34	31	36	37.5
TAL 042 C	J8S/4	M8S/4	option	6/12	36.5	33	38.5	40	40	36.5	42.5	44
TAL 042 D	J8S/4	M8S/4	option	6/12	40	36.5	42.5	44	44	40	46.5	48.5
TAL 042 E	J8S/4	M8S/4	option	6/12	43.5	39.5	46	48	48.5	44	51	53
TAL 042 F	J8S/4	M8S/4	option	6/12	48	43.5	51	53	54	49	57	59
TAL 042 G	J8S/4	M8S/4	option	6/12	56	51	59	62	62	56	66	68
TAL 042 H	J8S/4	M8S/4	option	6/12	65	59	69	72	71	65	75	78
TAL 044 A*	J8S/4	M8S/4	option	6/12	80	73	85	88	88	80	93	97
TAL 044 B*	J8S/4	M8S/4	option	6/12	92	84	98	101	100	91	106	110
TAL 044 C*	J8S/4	M8S/4	option	6/12	103	94	109	113	113	103	120	124
TAL 044 D*	J8S/4	M8S/4	option	6/12	115	105	122	127	125	114	133	138
TAL 044 E	J8S/4	M8S/4	option	6/12	143	130	152	157	156	142	165	172
TAL 044 H	J8S/4	M8S/4	option	6/12	154	140	163	169	169	154	179	186
TAL 044 J*	J8S/4	M8S/4	option	6/12	170	155	180	187	186	169	197	205
TAL 044 K	J8S/4	M8S/4	option	6/12	189	172	200	208	206	187	218	227
TAL 044 L*	J8S/4	M8S/4	option	6/12	210	191	223	231	225	205	239	248
TAL 044 M*	J8S/4	M8S/4	option	6/12	228	207	242	251	245	223	260	270
TAL 046 C	J8S/4	M8S/4	option	6/12	262	238	278	288	288	262	305	317
TAL 046 D	J8S/4	M8S/4	option	6/12	268	244	284	295	295	268	313	325
TAL 046 E	J8S/4	M8S/4	option	6/12	315	287	334	347	344	313	365	378
TAL 046 F	J8S/4	M8S/4	option	6/12	340	309	360	374	354	322	375	389
TAL 046 G*	J8TS/4	M8TS/4	option	6/12	365	332	387	402	-	-	-	-
TAL 046 H*	J8TS/4	M8TS/4	option	6/12	397	361	421	437	-	-	-	-
TAL 0473 A	J8S/4	M8S/4	option	6	494	450	524	543	510	565	541	561
TAL 0473 B	J8TS/4	M8TS/4	option	6	530	482	562	583	-	-	-	-
TAL 0473 C	J8TS/4	M8TS/4	option	6	590	537	625	649	-	-	-	-
TAL 0473 D	J8TS/4	M8TS/4	option	6	630	573	668	693	-	-	-	-
TAL 0473 E**	J8S/4	M8S/4	option	6	685	623	726	754	690	628	731	759
TAL 0473 F**	J8S/4	M8S/4	option	6	754	686	799	829	815	742	864	897
TAL 049 B**	J8TS/4	M8TS/4	option	6	790	719	837	869	-	-	-	-
TAL 049 C**	J8TS/4	M8TS/4	option	6	940	855	996	1034	-	-	-	-
TAL 049 D**	J8TS/4	M8TS/4	option	6	1045	951	1108	1150	-	-	-	-
TAL 049 E**	J8TS/4	M8TS/4	option	6	1146	1043	1215	1261	-	-	-	-

\* 6-wire only for paralleling.

\*\* For alternators paralleling, contact us.

# 60 Hz - 3-phase

1800 R.P.M. - P.F. 0.8

 Star (6 or 12-wire)	 Delta (6 or 12-wire)
<b>600 V</b>	<b>347 V</b>

## 9.4 - Winding 9S or 9 specific

Excitation					kVA @ 347V, 600V			
					40 °C cont.		40 °C St.by	27 °C St.by
TYPE	SHUNT	AREP+	PMG	wires	H: 125 K	F: 105 K	H: 150 K	H: 163 K
TAL 040 B	-	L9S/4	-	6/12	12.5	11.5	13.5	14
TAL 040 C	-	L9S/4	-	6/12	15.5	14	16.5	17
TAL 040 D	-	L9S/4	-	6/12	19	17.5	20	21
TAL 040 E	-	L9S/4	-	6/12	22	20	23.5	24
TAL 040 F	-	L9S/4	-	6/12	25	23	26.5	27.5
TAL 042 A	-	L9S/4	option	6/12	31.5	28.5	33.5	34.5
TAL 042 B	-	L9S/4	option	6/12	34	31	36	37.5
TAL 042 C	-	L9S/4	option	6/12	40	36.5	42.5	44
TAL 042 D	-	L9S/4	option	6/12	44	40	46.5	48.5
TAL 042 E	-	L9S/4	option	6/12	50	45.5	53	55
TAL 042 F	-	L9S/4	option	6/12	56.5	51	60	62
TAL 042 G	-	L9S/4	option	6/12	61	56	65	67
TAL 042 H	-	L9S/4	option	6/12	70	64	74	77
TAL 044 A*	-	L9S/4	option	6/12	80	73	85	88
TAL 044 B*	-	L9S/4	option	6/12	90	82	95	99
TAL 044 C*	-	L9S/4	option	6/12	113	103	120	124
TAL 044 D*	-	L9S/4	option	6/12	125	114	133	138
TAL 044 E*	-	L9S/4	option	6/12	156	142	165	172
TAL 044 H*	-	L9S/4	option	6/12	167	152	177	184
TAL 044 J	-	L9S/4	option	6/12	186	169	197	205
TAL 044 K*	-	L9S/4	option	6/12	200	182	212	220
TAL 044 L	-	L9+S/4	option	6/12	225	205	239	248
TAL 044 M	-	L9+S/4	option	6/12	232	211	246	255
TAL 046 C*	-	L9S/4	option	6/12	260	237	276	286
TAL 046 D*	-	L9S/4	option	6/12	281	256	298	309
TAL 046 E	-	L9S/4	option	6/12	344	313	365	378
TAL 046 F	-	L9S/4	option	6/12	360	328	382	396
TAL 046 G*	-	L9S/4	option	6/12	406	369	430	447
TAL 046 H*	-	L9S/4	option	6/12	438	399	464	482
TAL 0473 A	-	L9+S/4	option	6/12	500	455	530	550
TAL 0473 B*	-	L9S/4	option	6/12	570	519	604	627
TAL 0473 C*	-	L9S/4	option	6/12	625	569	663	688
TAL 0473 D*	-	L9S/4	option	6/12	669	609	709	736
TAL 0473 E	-	L9+S/4	option	6/12	685	623	726	754
TAL 0473 F	-	L9+S/4	option	6/12	755	687	800	831
TAL 049 B**	-	L9S/4	option	6	915	833	970	1007
TAL 049 C**	-	L9S/4	option	6	1025	933	1087	1128
TAL 049 D**	-	L9S/4	option	6	1100	1001	1166	1210
TAL 049 E**	-	L9S/4	option	6	1161	1057	1231	1277

\* 6-wire only for paralleling.

\*\* For alternators paralleling, contact us.

60 Hz - 1-phase

1800 R.P.M. - P.F. 0.8

 Delta (6-wire only)	 Double Delta (12-wire only)
220 - 240 V	

9.5 - Winding 6S or 6 standard

Excitation					kVA @ 220V - 240V			
TYPE	SHUNT	AREP+	PMG	wires	40 °C cont.		40 °C St.by	27 °C St.by
					H : 125 K	F : 105 K	H : 150 K	H : 163 K
TAL 040 B	J6/4	M6/4	-	6/12	9	8	9.5	10
TAL 040 C	J6/4	M6/4	-	6/12	11.5	10.5	12	12.5
TAL 040 D	J6/4	M6/4	-	6/12	13	12	14	14.5
TAL 040 E	J6/4	M6/4	-	6/12	14.5	13	15.5	16
TAL 040 F	J6/4	M6/4	-	6/12	16	14.5	17	17.5
TAL 042 A	J6/4	M6/4	option	6/12	18.9	17	20	20.8
TAL 042 B	J6/4	M6/4	option	6/12	19.2	17.5	20.5	21.1
TAL 042 C	J6/4	M6/4	option	6/12	23	21	24.5	25.5
TAL 042 D	J6/4	M6/4	option	6/12	24	22	25.5	26.5
TAL 042 E	J6/4	M6/4	option	6/12	27.5	25	29	30.5
TAL 042 F	J6/4	M6/4	option	6/12	30	27.5	32	33
TAL 042 G	J6/4	M6/4	option	6/12	34	31	36	37.5
TAL 042 H	J6/4	M6/4	option	6/12	39	35.5	41.5	43
TAL 044 A	J6/4	M6/4	option	6/12	46	42	49	51
TAL 044 B	J6/4	M6/4	option	6/12	52	47	55	57
TAL 044 C	J6/4	M6/4	option	6/12	59	54	63	65
TAL 044 D	J6/4	M6/4	option	6/12	65	59	69	72
TAL 044 E	J6/4	M6/4	option	6/12	76	69	81	84
TAL 044 H	J6/4	M6/4	option	6/12	81	74	86	89
TAL 044 J	J6/4	M6/4	option	6/12	95	86	101	105
TAL 044 K	J6/4	M6/4	option	6/12	105	96	111	116
TAL 044 L	J6/4	M6/4	option	6/12	113	102	119	124
TAL 044 M	J6/4	M6/4	option	6/12	125	114	133	136
TAL 046 C	J6/4	M6/4	option	6/12	152	138	161	167
TAL 046 D	J6/4	M6/4	option	6/12	165	150	175	182
TAL 046 E	J6/4	M6/4	option	6/12	182	166	193	200
TAL 046 F	J6/4	M6/4	option	6/12	200	182	212	220
TAL 046 G	J6/4	M6/4	option	6/12	215	196	228	237
TAL 046 H	J6/4	M6/4	option	6/12	231	210	245	254

# 60 Hz - Dedicated 1-phase

1800 R.P.M. - P.F. 1

 SE serie (4-wire)	 PA parallel (*) (4-wire)
<b>230 - 240 V</b>	<b>115 - 120 V</b>

(\*) TAL 044 not possible

## 9.6 - Dedicated winding M or M1

Excitation					kVA @ 115V - 120V, 230V - 240V			
					40 °C cont.		40 °C St.by	27 °C St.by
TYPE	SHUNT	AREP+	PMG	wires	H: 125 K	F: 105 K	H: 150 K	H: 163 K
TAL 040 C	JM/4	-	-	4	11.5	10.5	12	12.5
TAL 040 C1	JM/4	-	-	4	13.5	12.5	14.5	15
TAL 040 D	JM/4	-	-	4	14.5	13	15.5	16
TAL 040 E	JM/4	-	-	4	16	14.5	17	17.5
TAL 040 F	JM/4	-	-	4	17.5	16	18.5	19.5
TAL 042 A	JM1/4	-	-	4	23	21	24.5	25.5
TAL 042 B	JM1/4	-	-	4	26	23.5	27.5	28.5
TAL 042 C	JM1/4	-	-	4	29	26	30.5	32
TAL 042 D	JM1/4	-	-	4	31.5	28.5	33.5	34.5
TAL 042 E	JM1/4	-	-	4	36	33	38	39.5
TAL 042 F	JM1/4	-	-	4	40	36.5	42.5	44
TAL 042 G	JM1/4	-	-	4	47	43	50	51
TAL 042 H	JM1/4	-	-	4	53	48	56	58
TAL 044 C	JM1/4	-	-	4	80	73	85	88
TAL 044 D1	JM1/4	-	-	4	100	91	106	110
TAL 044 E	JM1/4	-	-	4	115	105	122	127
TAL 044 J	-	-	-	4	-	-	-	-
TAL 044 K	JM1/4	-	-	4	125	114	133	138

For P.F. 0.8: derating 15%



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