

TAL A47

455 - 825 kVA



Leroy-Somer is a leading global supplier of alternators for emergency power. Our new TAL low voltage alternators, with optimal performance for commercial and industrial applications, are a simple, efficient solution for your onsite power requirements.

Leroy-Somer's TAL alternators are specially designed to meet the power needs of telecom towers and commercial and industrial buildings. TAL is compatible with most engine brands.

Common Data

Insulation class	H	Excitation system	SHUNT	AREP / PMG
Winding pitch	2/3 (Winding 6S)	AVR type	R 150	R 180
Number of wires	6	Voltage regulation (*)	± 1 %	
Protection	IP 23	Total Harmonic distortion THD (**) in no-load	< 3.5 % according to C.E.I.	
Altitude	≤ 1000 m	Total Harmonic distortion THD (**) in linear load:	< 5 % according to C.E.I.	
Overspeed	2250 R.P.M.	Waveform: NEMA = TIF (**)	< 50	
Air flow (m³/s)	50Hz : 0.9	Waveform: I.E.C. = THF (**)	< 2%	
	60Hz : 1.1	(*) Steady state. (**) Total harmonic distortion between phases, no-load or on-load (non-distorting)		

Ratings (50 Hz – 1500 r.p.m and 60 Hz – 1800 r.p.m.)

kVA / kW - P.F. = 0.8														
TAL A47	50 Hz - 1500 R.P.M.						60 Hz - 1800 R.P.M.							
Duty/T°C	Continuous / 40°C			Stand-by / 27°C			Continuous / 40°C				Stand-by / 27°C			
Class/T°K	H / 125°K			H / 163°K			H / 125°K				H / 163°K			
	Rating kVA			Rating kVA			Rating kVA				Rating kVA			
Phase	3 ph.			3 ph.			3 ph.				3 ph.			
Y	380V	400V	415V	380V	400V	415V	380V	416V	440V	480V	380V	416V	440V	480V
Δ	220V	230V	240V	220V	230V	240V	220V	240V	254V	277V	220V	240V	254V	277V
TAL-A47-B	420	455	455	460	500	500	475	510	530	570	525	560	585	625
TAL-A47-C	465	500	500	510	550	550	520	555	590	625	570	610	650	690
TAL-A47-D	510	550	550	560	600	600	560	610	630	690	615	670	695	750
TAL-A47-E	555	600	600	610	660	660	600	660	685	750	660	725	755	825
TAL-A47-F	610	660	660	670	730	730	650	715	755	825	720	785	830	910

Leroy-Somer™

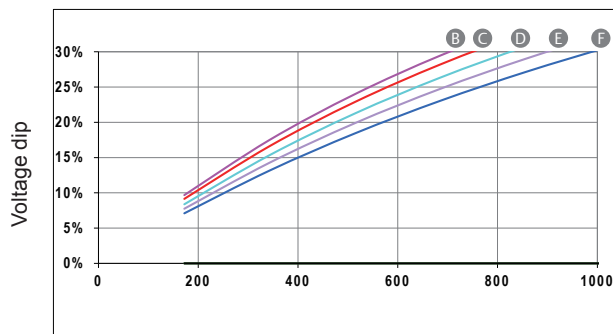
Efficiencies (%)

Class H / 40 ° C

	Three Phase: 400 V - 50 Hz										Three Phase: 480 V - 60 Hz										
	P.F. = 0.8					P.F. = 1					P.F. = 0.8					P.F. = 1					
	1/4	2/4	3/4	4/4	St.By	1/4	2/4	3/4	4/4	St.By	1/4	2/4	3/4	4/4	St.By	1/4	2/4	3/4	4/4	St.By	
TAL-A47-B	94.1	94.7	94.0	93.0	92.5	95.0	96.1	95.9	95.4	95.2	TAL-A47-B	93.4	94.5	94.1	93.3	92.9	94.2	95.8	95.9	95.5	95.3
TAL-A47-C	94.3	95.2	94.7	93.9	93.5	95.2	96.4	96.4	96.0	95.8	TAL-A47-C	93.7	95.0	94.7	94.1	93.8	94.4	96.1	96.2	96.0	95.8
TAL-A47-D	94.2	95.4	95.1	94.5	94.2	95.0	96.5	96.6	96.4	96.2	TAL-A47-D	93.5	95.2	95.1	94.7	94.4	94.2	96.2	96.5	96.3	96.2
TAL-A47-E	94.8	95.7	95.3	94.6	94.3	95.6	96.8	96.8	96.4	96.3	TAL-A47-E	94.2	95.5	95.3	94.8	94.5	94.8	96.5	96.6	96.4	96.3
TAL-A47-F	94.8	95.8	95.5	94.9	94.7	95.5	96.8	96.9	96.7	96.5	TAL-A47-F	94.2	95.6	95.5	95.1	94.9	94.8	96.5	96.8	96.6	96.5

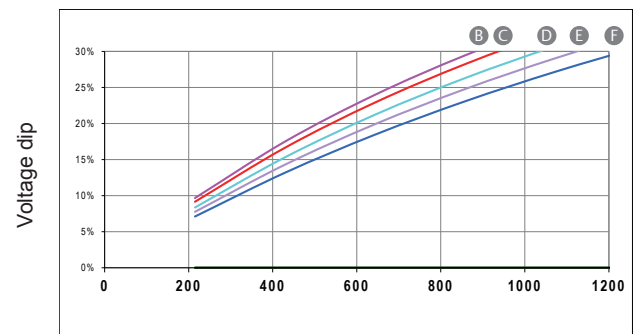
Transient Voltage Variation – Motor Starting

400V - 50 Hz



KVA at P.F=0.6

480V - 60 Hz



KVA at P.F=0.6

Locked Rotor – kVA at 0.6 Power Factor