

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
Winding Pitch	2/3 (Winding 6S)	A.V.R. Model	R120
Leads	6	Voltage Regulation (*)	± 1 %
Drip Proof	IP 23	Total Harmonic THD (**) in no-load	< 3.5 % according to C.E.I.
Altitude	≤ 1000 m	Total Harmonic THD (**) in linear load:	< 5 % according to C.E.I.
Overspeed	2250 R.P.M.	Waveform NEMA = TIF (**)	< 50
(*) Steady state duty. (**) Total harmonic content line to line, at no loads of full rated linear and balanced loads.		Waveform I.E.C. = THF (**)	< 2%

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

kVA / kW - P.F. = 0.8																	
TAL A44	50 Hz - 1500 R.P.M.								60 Hz - 1800 R.P.M.								
Duty/T°C	Continuous / 40°C				St. By/ 27°C				Reactance	Continuous / 40°C				St. 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	x'd	x'd	380V	416V	440V	480V	380V	416V	440V	480V	
Δ	220V	230V	240V	220V	230V	240V	x'd	x'd	220V	240V	254V	277V	220V	240V	254V	277V	
TAL-A44-C	81	85	85	88	93.5	93.5	15.7	9.8	81	88	93	102	89	97	102	112	
TAL-A44-D	100	100	95	110	110	105	15.1	9.4	95	104	109	120	104	114	120	132	
TAL-A44-E	119	125	119	130	137.5	130	14.8	9.3	119	130	137	150	130	143	150	165	
TAL-A44-H	137.5	137.5	128	151.5	151.5	141	14.1	8.8	130	143	150	165	143	157	165	182	
TAL-A44-J	143	150	143	157	165	157	13.1	8.2	142	156	164	180	156	171	180	198	
TAL-A44-K	161.5	170	161.5	178	187.5	178	12.4	7.8	161	177	186	204	177	194	204	224	

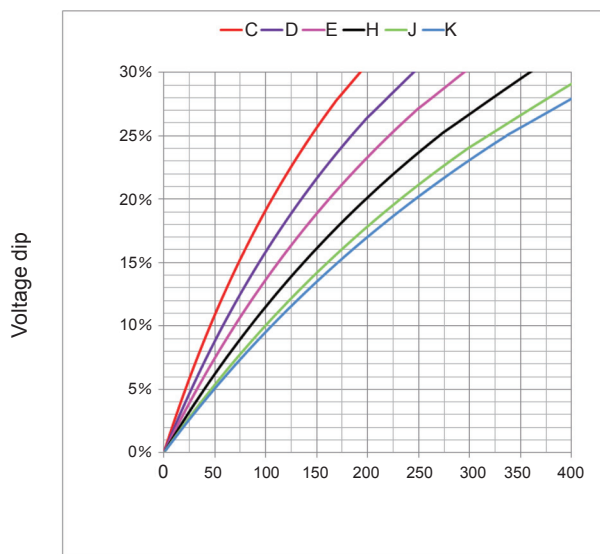
Efficiencies (%)

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-A44-C	84.1	89.8	90.3	87.6	85.9	85.6	91.8	93.5	92.7	91.9	TAL-A44-C	83.9	89.3	90.6	88.7	87.1	85.6	90.4	93.2	92.9	92.1
TAL-A44-D	84.6	90.5	91.3	89.0	87.8	86.1	92.3	94.1	93.5	92.4	TAL-A44-D	84.7	90.0	91.5	90.0	88.8	86.3	91.0	93.9	93.7	93.0
TAL-A44-E	86.2	91.5	92.0	89.4	87.8	87.6	93.1	94.7	93.9	93.2	TAL-A44-E	86.6	91.1	92.3	90.4	89.1	88.2	92.0	94.5	94.1	93.4
TAL-A44-H	86.2	91.8	92.7	90.8	89.6	87.6	93.3	95.1	94.6	94.0	TAL-A44-H	86.7	91.4	92.9	91.6	90.7	88.2	92.2	94.9	94.7	94.4
TAL-A44-J	86.3	91.9	92.9	91.0	89.8	87.6	93.4	95.2	94.7	94.1	TAL-A44-J	86.9	91.6	93.1	91.8	90.9	88.4	92.3	95.0	94.9	94.5
TAL-A44-K	87.8	92.7	93.4	91.4	90.0	89.0	94.0	95.6	94.9	94.3	TAL-A44-K	88.5	92.4	93.6	92.2	91.2	89.9	93.5	95.4	95.1	94.7

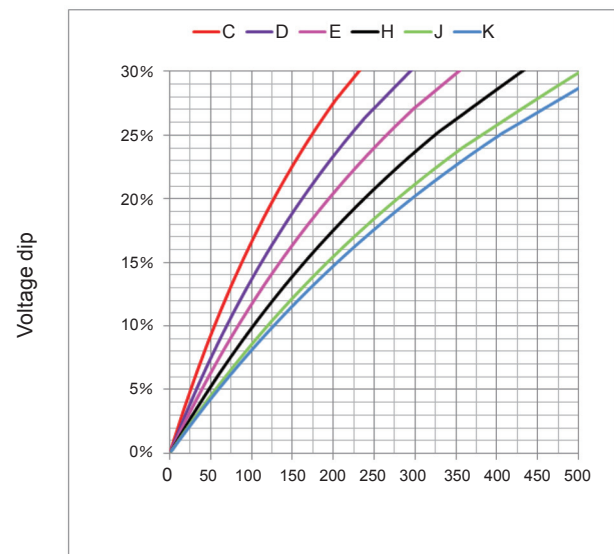
Transient Voltage Variation – Motor Starting

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