

SL3 Series AC Drives Energy Efficiency Report

(Release date: 20230223 Version: Ver1.00)

According to GB/T 12668.902-2021/IEC 61800-9-2:2017

1. Product rated specifications

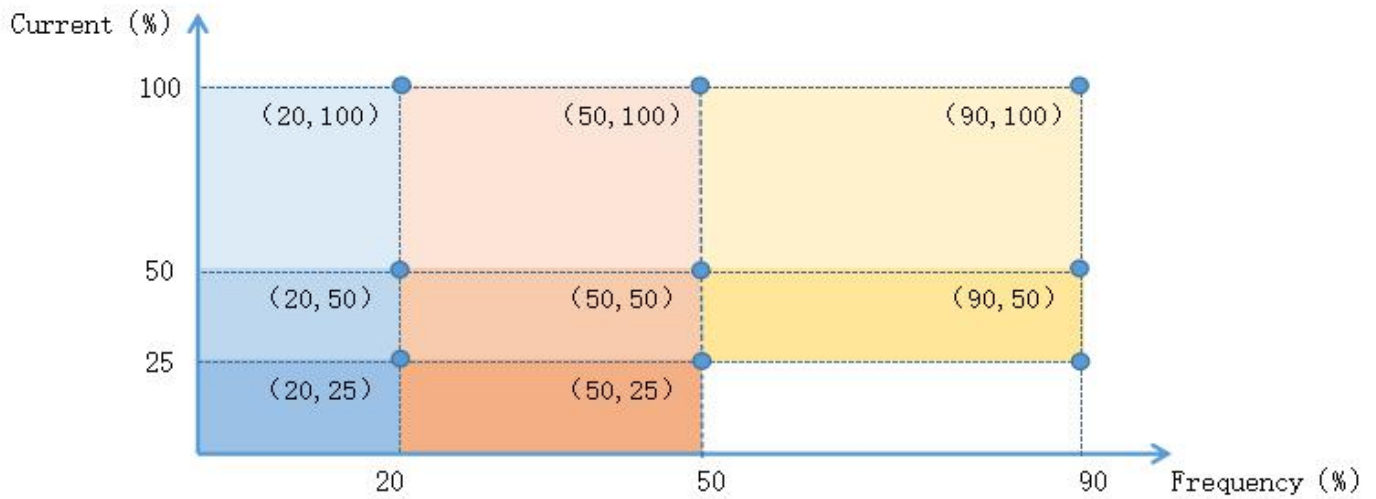
Model name	Input voltage (V)	Apparent output power (kVA)	Output power (kW)	Output current (A)	Standby loss (W)	Relative power loss (%)
SL3-021-0.4K	1PH 220V	1	0.4	2.7	2	0.30%
SL3-021-0.75K	1PH 220V	1.5	0.75	4.5	2	0.21%
SL3-021-1.5K	1PH 220V	2.5	1.5	8	2	0.13%
SL3-021-2.2K	1PH 220V	4.2	2.2	11	3	0.08%
SL3-043-0.4K	3PH 440V	1	0.4	1.5	4	0.57%
SL3-043-0.75K	3PH 440V	2	0.75	2.6	4	0.29%
SL3-043-1.5K	3PH 440V	3	1.5	4.2	4	0.19%
SL3-043-2.2K	3PH 440V	4.6	2.2	6	4	0.14%

Note 1.The input power frequency of all the above models are 50/60HZ.

Note 2.The ambient temperature should be within 40°C

2. Reference operation points

Below are the 8 reference operation points by using 60HZ as 100% frequency and rated current as 100% current :



3. Power loss

Loss(W)	Reference operation points								
	Model name	(90, 100)	(90, 50)	(50, 100)	(50, 50)	(50, 25)	(20, 100)	(20, 50)	(20, 25)
SL3-021-0.4K		32	17	26	15	10	21	13	8
SL3-021-0.75K		53	24	42	23	15	34	17	10
SL3-021-1.5K		111	44	80	41	20	63	30	16
SL3-021-2.2K		162	72	118	57	27	79	39	21
SL3-043-0.4K		33	19	26	17	14	22	15	12
SL3-043-0.75K		51	33	44	25	20	32	22	15
SL3-043-1.5K		71	43	60	42	23	46	33	18
SL3-043-2.2K		99	59	87	56	32	65	40	27

4. Power loss rate and efficiency level

loss rate	Power loss rate with reference operation points(%)								IE class	
	Model name	(90, 100)	(90, 50)	(50, 100)	(50, 50)	(50, 25)	(20, 100)	(20, 50)		(20, 25)
SL3-021-0.4K		3.20%	1.65%	2.59%	1.52%	0.95%	2.12%	1.30%	0.79%	IE2
SL3-021-0.75K		3.53%	1.60%	2.80%	1.53%	1.00%	2.25%	1.13%	0.69%	IE2
SL3-021-1.5K		3.47%	1.38%	2.50%	1.28%	0.61%	1.96%	0.94%	0.48%	IE2
SL3-021-2.2K		3.86%	1.71%	2.81%	1.36%	0.64%	1.88%	0.93%	0.50%	IE2

SL3-043-0.4K	3.30%	1.87%	2.56%	1.68%	1.40%	2.20%	1.49%	1.16%	IE2
SL3-043-0.75K	2.55%	1.65%	2.20%	1.24%	1.01%	1.59%	1.10%	0.75%	IE2
SL3-043-1.5K	2.37%	1.42%	2.00%	1.40%	0.78%	1.53%	1.09%	0.61%	IE2
SL3-043-2.2K	2.15%	1.28%	1.89%	1.22%	0.70%	1.41%	0.87%	0.59%	IE2

Note 1. All of the above inverter loss data are tested by adopting the "Input-output loss determination method for complete drive modules (CDM)" and are under a typical factory laboratory environment.

Note 2. The loss value of the inverter will be affected by the following factors: the inverter parameter settings (such as carrier frequency setting, torque boost, etc.), factory power voltage fluctuations, voltage harmonics, the type of motor used, the actual wiring, etc.