



DC POWER SOLUTIONS



24 & 48 VDC low voltage alternators

Designed for applications requiring 24 & 48 VDC low voltage supply, Sincro DC power solutions are suitable both as battery chargers and emergency power supplies of auxiliary circuits, in the telecommunication, transports and industrial field.

Applications

- Battery chargers
- Power supply of auxiliary circuits, high/medium voltage disconnectors coils, signalling devices
- Power supply of monitoring and alarm systems

General features

- **AVR electronic voltage regulation**
- Based on three-phase synchronous alternators
- 1500 rpm or 3000 rpm fixed speed
- Constant DC output voltage
- Adjustable output voltage
- Current overload protection
- Fan cooled
- Complying with EN 60034-1, IEC 60034-1, ISO 8528-3

Sectors of use

- Telecommunications
- Industry
- Transports
- Military

Advantages

- High efficiency
- Low voltage ripple
- High reliability
- Available with the most common couplings

Electrical data

	E3 - FT	FB
Type	three-phase synchronous with AVR	
Technology	brushes	brushless
Fixed speed	1500 (1800) or 3000 (3600) rpm	
Over speed	+ 20%	
Underspeed protection	included	
Nominal voltage	24 VDC or 48 VDC ⁽¹⁾	
Adjustable output voltage	from 24 VDC to 29 VDC or from 48 VDC to 58 VDC ⁽¹⁾	
Output current	see selection table @ 24 VDC or 48 VDC	
Max output power (Watt)	Current (A) x 24 (VDC) or 48 (VDC)	
Efficiency	> 0,83	
Current limit protection	included	
Ripple with battery connected	< 3% ⁽²⁾	
Ripple with battery disconnected	< 7%	
Insulation class	F / H	H
Temperature rise class	F	H
IP protection	IP23	
Operating temperature range	- 20 °C to + 40 °C (until + 55 °C with derating)	
Electromagnetic compatibility	EN 61000-6-2, EN 61000-6-4	

(1) see selection table

(2) on request ripple < 200mV rpm with battery connected



Selection table

BRUSHES

3000 rpm / 2 poles			
24 V		48 V	
current	model	current	model
120A	E3 2-24/120	60A	E3 2-48/60
200A	E3 2-24/200	100A	E3 2-48/100
350A	FT 2-24/350	150A	E3 2-48/150
500A	FT 2-24/500	250A	FT 2-48/250
600A	FT 2-24/600	300A	FT 2-48/300

3000 rpm / 2 poles / high current / compact design			
24 V		48 V	
current	model	current	model
300A	E3 2-24/300	200A	E3 2-48/200
400A	E3 2-24/400		

1500 rpm / 4 poles			
24 V		48 V	
current	model	current	model
200A	FT 4-24/200	100A	FT 4-48/100
300A	FT 4-24/300	150A	FT 4-48/150
400A	FT 4-24/400	200A	FT 4-48/200

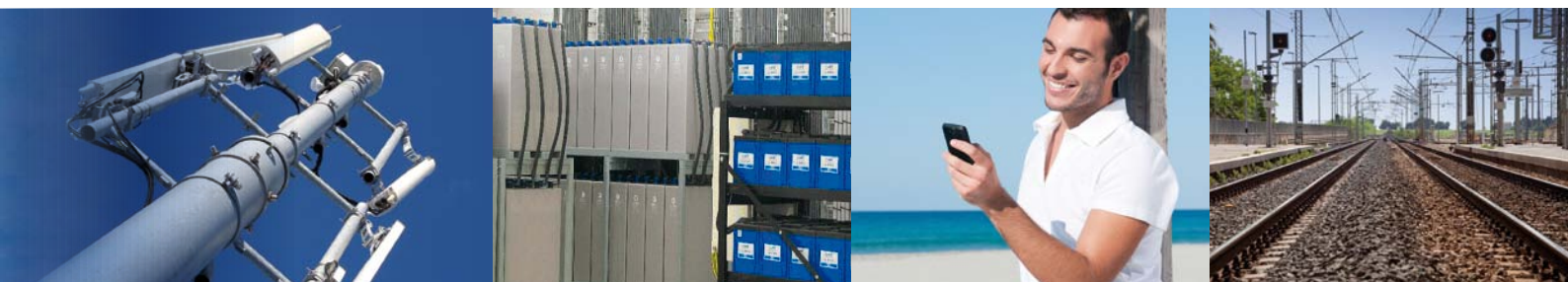
BRUSHLESS

3000 rpm / 2 poles			
24 V		48 V	
current	model	current	model
300A	FB 2-24/300	250A	FB 2-48/250
		300A	FB 2-48/300

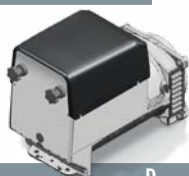
1500 rpm / 4 poles			
24 V		48 V	
current	model	current	model
200A	FB 4-24/200	100A	FB 4-48/100
250A	FB 4-24/250	125A	FB 4-48/125
		150A	FB 4-48/150
		200A	FB 4-48/200

Operating derating factors

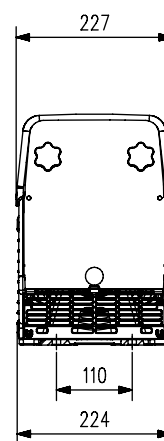
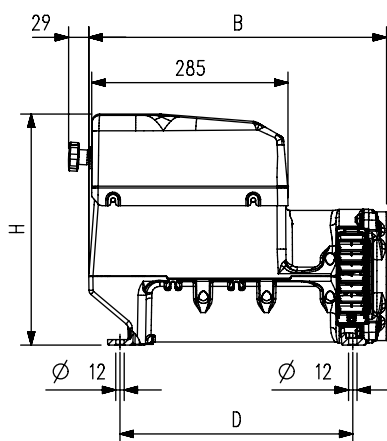
amb. temp. factor	25 °C	40 °C	45 °C	50 °C	55 °C
	1,05	1	0,96	0,92	0,88
altitude factor	1000m	1500m	2000m	2500m	3000m
	1	0,96	0,93	0,9	0,86



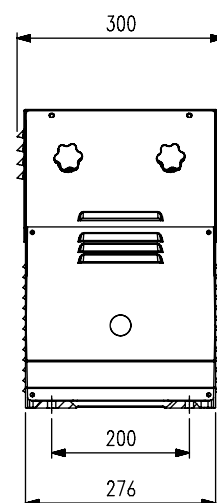
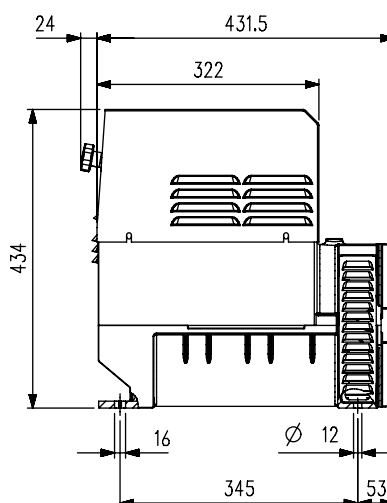
Overall dimensions



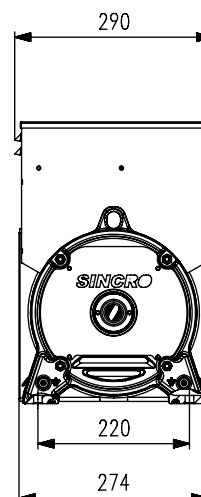
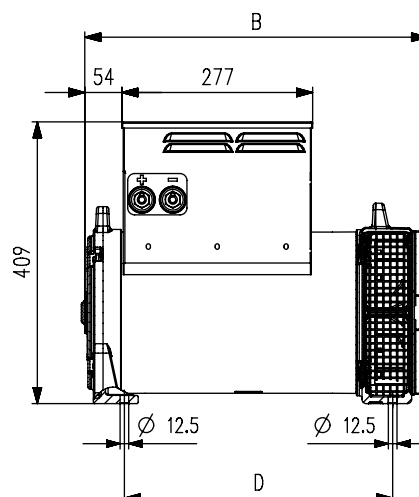
model @ 24V	D mm	B * mm	H mm	mass Kg
E3 2-24/120	283	377,5	336	20,2
E3 2-24/200	283	377,5	336	23,7
E3 2-24/300	338	432,5	369	38,5
E3 2-24/400	338	432,5	369	42,3
model @ 48V	D mm	B * mm	H mm	mass Kg
E3 2-48/60	283	377,5	336	20,2
E3 2-48/100	283	377,5	336	23,7
E3 2-48/150	338	432,5	336	37,5
E3 2-48/200	338	432,5	336	41,1



model @ 24V	D mm	B * mm	mass Kg
FT 2-24/350	345	431,5	48
FT 2-24/500	345	431,5	52,3
FT 2-24/600	345	431,5	69,4
FT 4-24/200	345	431,5	31,3
FT 4-24/300	345	431,5	48,3
FT 4-24/400	345	431,5	59,2
model @ 48V	D mm	B * mm	mass Kg
FT 2-48/250	345	431,5	52,3
FT 2-48/300	345	431,5	69,4
FT 4-48/100	345	431,5	31,3
FT 4-48/150	345	431,5	48,3
FT 4-48/200	345	431,5	59,2



model @ 24V	D mm	B * mm	mass Kg
FB 2-24/300	329	437	70,6
FB 4-24/200	329	437	59,2
FB 4-24/250	329	437	63,2
model @ 48V	D mm	B * mm	mass Kg
FB 2-48/250	329	437	70,6
FB 2-48/300	389	497	84,7
FB 4-48/100	329	437	59,2
FB 4-48/125	329	437	63,2
FB 4-48/150	389	497	77,7
FB 4-48/200	389	497	83,2



* B quote refers to J609B coupling. For other couplings please refer to E3 - FT - FB series data sheets

Condizioni di garanzia

Soga garantisce ai propri clienti gli alternatori, prodotti al suo interno, per un periodo di 18 mesi a decorrere dalla data di fatturazione, oppure di 12 mesi a decorrere dalla data di prima messa in funzione, a seconda di quale delle due avvenga per prima.

Si precisa che detta garanzia è rivolta ai soli clienti di Soga ai quali direttamente risponde. Soga non riconosce direttamente la garanzia ad alcun soggetto che, pur in possesso dei suoi prodotti, non li abbia da essa acquistati direttamente.

Entro i suddetti termini Soga si impegna a fornire gratuitamente pezzi di ricambio di quelle parti che, a giudizio di Sincro o di un suo rappresentante autorizzato, presentino difetti di fabbricazione o di materiale oppure, a suo giudizio, ad effettuare la riparazione direttamente o per mezzo di officine autorizzate senza assumersi alcun onere per il trasporto. Rimane comunque esclusa qualsiasi altra forma di responsabilità o obbligazione per altre spese, danni e perdite dirette o indirette derivanti dall'uso o dalla impossibilità d'uso dei prodotti, sia totale che parziale. La riparazione o la fornitura sostitutiva non prolungherà, né rinnoverà la durata del periodo di garanzia. La garanzia decadrà: qualora si manifestassero inconvenienti o guasti dovuti ad imperizia, utilizzo oltre ai limiti delle prestazioni nominali, se il prodotto avesse subito modifiche o se dovesse ritornare disassemblato o con dati di targa alterati o manomessi.

Warranty conditions

Soga guarantees the own alternators for a period of 18 months starting from the invoice date or 12 months starting from the first start up, whichever occurs first.

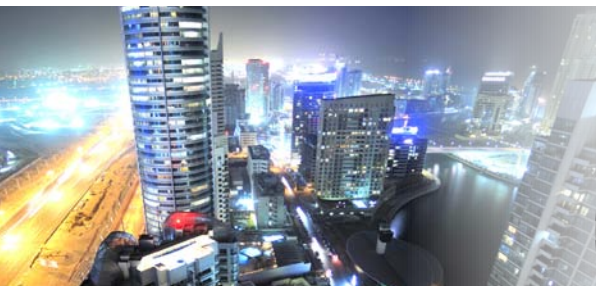
We confirm that warranty is directed only to Soga customers to which we respond.

Soga does not grant warranty to those who have not directly purchased the product from the factory, in spite of the possession of it.

Within the above mentioned terms, Soga commits itself to supply free of charge those spare parts that, according to its judgment or to the one of an authorized representative, appear with manufacturing or material defects or, always to its judgment, to directly or through an authorized center carry out the repairing without undertaking transport costs. We anyhow exclude forms of responsibility or obligation for other costs, damages and direct or indirect loss caused by total or partial usage or impossible usage of the products.

The repairing or the substitution will not extend or renew the warranty duration.

Warranty will not be granted: whenever break-downs or problems may appear because of lack of experience, usage over the nominal performances, if the product had been modified or should return incomplete, disassembled or with modified nameplate data.



Also available
BRUSHLESS ALTERNATORS



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