

**SPER Regulator/Rectifier - Price List - 12.06.2024.**

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For generators up to 100VAC - standard

label	type	current	heatsink	purpose	price including VAT	ACG power	dissipation	K/W	heating @v=0m/s	dimensions L*W*H [mm]
<a href="#">14V-1F-10A-A</a>	<a href="#">1F</a>	10A	A	moto	56,90€	140W	25W	1,8	+45K	88*100*25
<a href="#">14V-1F-20A-A</a>	1F	20A	A	moto	60,30€	280W	50W	1,8	+90K	88*100*25
14V-1+1F-15A-A	1+1F	15A	A	moto	53,35€	210W	22,5W	1,8	+40,5K	88*100*25
<a href="#">14V-3F-15A-A</a>	<a href="#">3F</a>	15A	A	moto	65,00€	210W	37,5W	1,8	67,5K	88*100*25
14V2X-1F-10A-B	1F	5+5A	B	marine		140W	25W	1,5	+37,5K	88*100*35
<a href="#">14V-1F-10A-B</a>	<a href="#">1F</a>	10A	B	marine	61,85€	140W	25W	1,5	+37,5K	88*100*35
<a href="#">14V-1F-20A-B</a>	<a href="#">1F</a>	20A	B	moto	65,30€	210W	50W	1,5	+75K	88*100*35
14V-1+1F-15A-B	1+1F	15A	B	moto	59,45€	210W	22,5W	1,5	+33,75K	88*100*35
<a href="#">14V-3F-15A-B</a>	<a href="#">3F</a>	15A	B	moto	67,00€	210W	37,5W	1,5	+56,25K	88*100*35
14V-3F-20A-B	3F	20A	B	moto	71,25€	210W	50W	1,5	+75K	88*100*35
14V-1F-30A-B	1F	30A	B	moto		420W	75W	1,5	+112,5K	88*100*35
14V-3F-30A-B	3F	30A	B	moto		420W	75W	1,5	+112,5K	88*100*35
14V-1F-20A-C	1F	20A	C	marine		280W	50W	0,85	+42,5K	100*100*50
14V-1F-30A-C	1F	30A	C	moto		420W	75W	0,85	+63,75K	100*100*50
14V-3F-30A-C	3F	30A	C	moto		420W	75W	0,85	+63,75K	100*100*50
14V-3F-45A-2C	3F	45A	C*2	moto		630W	112,5W	0,42	+47,25K	100*200*50

For generators up to 200VAC - HV (3FHV up 8000 rpm)

label	type	current	heatsink	purpose	price including VAT	ACG power	dissipation	K/W	heating @v=0m/s	dimensions L*W*H [mm]
14V-1+1FHV-15A-A	1+1FHV	15A	A	moto	67,00€	210W	22,5W	1,8	+40,5K	88*100*25
14V-1FHV-15A-A	1FHV	15A	A	moto	67,80€	210W	37,5W	1,8	+67,5K	88*100*25
14V-3FHV-15A-A	3FHV	15A	A	moto		210W	37,5W	1,8	67,5K	88*100*25
<a href="#">14V-1FHV+10A-B</a>	<a href="#">1FHV+</a>	10A	B	marine	70,45€	140W	25W	1,5	+37,5K	88*100*35
<a href="#">14V-1FHV-20A-B</a>	<a href="#">1FHV</a>	20A	B	moto	73,00€	280W	50W	1,5	+75K	88*100*35
14V-1+1FHV-15A-B	1+1FHV	15A	B	moto	60,30€	210W	22,5W	1,5	+33,75K	88*100*35
14V-3FHV-15A-B	3FHV	15A	B	moto		210W	37,5W	1,5	+56,25K	88*100*35
<a href="#">14V-1FHV-30A-B</a>	<a href="#">1FHV</a>	30A	B	moto	89,15€	420W	80W	1,5	+120K	88*100*35
14V-1+1FHV-30A-B	1+1FHV	30A	B	moto	72,20€	420W	40W	1,5	+60K	88*100*35
<a href="#">14V-3FHV-30A-B</a>	<a href="#">3FHV</a>	30A	B	moto	92,50€	420W	80W	1,5	+120K	88*100*35
14V-1FHV-20A-C	1FHV	20A	C	marine	on request	280W	53W	0,85	+45,05K	100*100*50
14V-1FHV-30A-C	1FHV	30A	C	moto		420W	80W	0,85	+68K	100*100*50
14V-3FHV-30A-C	3FHV	30A	C	moto		420W	80W	0,85	+68K	100*100*50

For three-phase generators up to 200VAC above 8000 rpm - HVSP

label	type	current	heatsink	purpose	price including VAT	ACG power	dissipation	K/W	heating @v=0m/s	dimensions L*W*H [mm]
14V-3FHVSP-15A-AX	3FHVSP	15A	AX	moto		210W	37,5W	1,2	+45K	88*142*25
<a href="#">14V-3FHVSP-30A-AX</a>	<a href="#">3FHVSP</a>	30A	AX	moto	136,00€	420W	80W	1,2	+96K	88*142*25
<a href="#">14V-3FHVSP-30A-AX-K2</a>	<a href="#">3FHVSP</a>	30A	AX	moto	146,00€	420W	80W	1,2	+96K	88*142*25
<a href="#">14V-3FHVSP-30A-BX</a>	<a href="#">3FHVSP</a>	30A	BX	moto	144,4€	420W	80W	1	+80K	88*142*35

Parallel regulators/rectifiers by order

label	type	current	heatsink	purpose	price including VAT	ACG power	dissipation	K/W	heating @v=0m/s	dimensions L*W*H [mm]
<b>7V-1FP-15A-A</b> Honda XL125 Only for the battery	1FP	15A	A	moto	65,40€	210W	28,5W	1,8	+51K	88*100*25
<b>14V-1FP-15A-A</b> Geely JL150T	1FP	15A	A	moto	61,85€	210W	28,5W	1,8	+51K	88*100*25
<b>14V-1FP-15A-B</b> Kymco Zing 250 (plug on AC input)	1FP	15A	B	moto	79,00€	210W	28,5W	1,5	+42,75K	88*100*35
<b>14V-3FP-15A-AX-K</b> plug connected in parallel with the regulator of Aprilia Leonardo 150	3F	15A	AX	moto	79,00€	420W	40W	1,5	67,5K	88*143*25

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AC/DC regulators/rectifiers with grounded generators

label	type	current	heatsink	purpose	price including VAT	ACG power	dissipation	K/W	heating @v=0m/s	dimensions L*W*H [mm]
<b>14VAC-1F-15A-A</b> AC Regulator for Lights	1FAC	15A	A	moto	61,85€	210W	28,5W	1,8	+51K	88*100*25
<b>14V-1FGZ-15A-B</b> with OVP Protection	1FGZ	15A	B	moto	61,85€	210W	28,5W	1,5	42,75K	88*100*35
<b>12VAC+14V-1FG-15A-AX</b> for Dual Grounded Generator with OVP Protection	1FAC+1 FG	15A	AX	moto	118,90€	210W	28,5W	1,5	+42,75K	88*143*25
<b>14V-1+1FGZ-30A-B</b> for Dual Grounded Generator with OVP Protection	1+1FGZ	30A	B	moto	84,95€	420W	57W	1,5	+85,5K	88*100*35

Other regulators/rectifiers by order

label	type	current	heatsink	purpose	price including VAT	ACG power	dissipation	K/W	heating @v=0m/s	dimensions L*W*H [mm]
<b>14V-1+1F-30A-B-LO</b> 6 Wires with Output for Bulb	1+1F	30A	B	moto	80,70€	420W	57W	1,5	+85,5K	88*100*35
<b>14V-1+1F-30A-B-K-LO</b> 6 Wires with Output for Bulb and Contact (Tomo Vinković)	1+1F	30A	B	moto	82,40€	420W	57W	1,5	+85,5K	88*100*35
<b>14V-1+1FU-15A-B</b> (5 Wires, Can Also Work as 14V-1F-15A-B) Tomo Vinković	1+1F ili 1F	15A	B	moto	65,40€	210W	22,5W ili 37,5W	1,5	+33,75K	88*100*35
<b>14V-3FA-30A-AX-K</b> Alternator Three-Phase Regulator for Motorcycles 12V with Diodes - PNP Output for Current and Temperature Protection HONDA CB900	3F	30A, excitation 3,5A	AX	moto	136,00€	420W	80W	1,2	+96K	88*143*25
<b>14V-3FHV-30A-A 100°C</b> No Warranty	3FHV	30A	B	moto	97,70€	420W	57W	1,5	+85,5K	88*100*25
<b>14V-3FHV-30A-B 100°C</b> No Warranty	3FHV	30A	B	moto	102,70€	420W	57W	1,5	+85,5K	88*100*35
<b>14V-DS-30A-B</b> Starter Regulator (NPN out) without Current Limit	DS	30A	B	moto	84,95€	420W	30W	1,5	+45K	88*100*35

**Label of the Regulator is Obtained by Composition: Voltage-Type-Current-Heatsink-Indicator**

**Voltage: 14V or by order (7V)**

**Type: 1F, 3F, 1+1F, 1FHV, 3FHV, 1+1FHV, 1+1FGZ, 3FHVSP, 1FP, 3FP, 1FG, 1FGZ, 3FA**

**Current: 10A, 15A, 20, 30A**

**Heatsink: A, AX, B, BX, C**

**Indicator: LO (lamp out NPN), LO+ (lamp out PNP), LD (LED out PNP), LDP (LED pulsing out PNP), LI (built-in LED), LIP (LED pulsing on the regulator), KSLD (LED in the contact wire circle pulsing or normal)**

**Addition: K (input for contact to turn on the regulator)**

**Temperature Protection: 80°C or 100°C (no warranty)**

-LIP - blinking LED on the regulator - 2.50€

-LIP2X – Dual Blinking LED for Serial and Parallel Regulator - 5.05€

-LDP - blinking output for LED - 6.75€

-KSLD - blinking LED in the contact wire circle - 10.05€

-LD - LED output - 5.05€

-LO - NPN output for bulb (connects to ground) - 8.50€

+LO - PNP output for bulb (provides plus) - 8.50€