

TECHNICAL DATA

SHARP 50 BATTERY CHARGER

STATED DATA ACCORDING TO MICROPOWER STANDARD

| VARIABLE | UNIT | VALUE | | | | | | | | | |
|--|-------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--|
| Part number | - | SP2383 | SP2389 | PS2386 | SP2423 | SP2429 | PS2426 | SP2483 | SP2489 | PS2486 | |
| Model | - | SHARP 50 | SHARP 50 | SHARP 50 | SHARP 50 | SHARP 50 | SHARP 50 | SHARP 50 | SHARP 50 | SHARP 50 | |
| Type | - | 24V/80A | 24V/80A | 24V/80 | 24V/100A | 24V/100A | 24V/100A | 24V/130A | 24V/130A | 24V/130A | |
| Output voltage | V | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | |
| Output current (at 2,4 Vpc) | A | 80 | 80 | 80 | 100 | 100 | 100 | 130 | 130 | 130 | |
| MAINS DATA | | | | | | | | | | | |
| Mains phase | - | 3 Phase | 3 Phase | 3 Phase | 3 Phase | 3 Phase | 3 Phase | 3 Phase | 3 Phase | 3 Phase | |
| Mains voltage supply | V | 200-240 | 380-440 | 480-480 | 200-240 | 380-440 | 480-480 | 200-240 | 380-440 | 480-480 | |
| Mains current (at min rated mains V) | A | 7,8 | 4,2 | 3,1 | 9,8 | 5,3 | 3,8 | 12,7 | 6,7 | 5,0 | |
| Mains current (at max rated mains V) | A | 6,5 | 3,6 | - | 8,1 | 4,6 | - | 10,5 | 5,8 | - | |
| Max mains fuse | A | 25 | 16 | 16 | 25 | 16 | 16 | 25 | 16 | 16 | |
| Mains cable area | mm2 | 4x1,5 | 4x1,5 | 4xAWG14 | 4x1,5 | 4x1,5 | 4xAWG14 | 4x2,5 | 4x1,5 | 4xAWG14 | |
| Mains cable length | m | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| Mains connector (included) | - | CEE16 (Blue) | CEE16 (Red) | NEMA L16-30P | CEE16 (Blue) | CEE16 (Red) | NEMA L16-30P | CEE16 (Blue) | CEE16 (Red) | NEMA L16-30P | |
| BATTERY CONNECTION | | | | | | | | | | | |
| Battery cable | mm2 | 2x25 | 2x25 | 2xAWG4 | 2x35 | 2x35 | 2xAWG2 | 2x50 | 2x50 | 2xAWG1/0 | |
| Battery cable length | m | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| Battery connector (not included) | - | User defined | User defined | User defined | User defined | User defined | User defined | User defined | User defined | User defined | |
| ELECTRIC DATA | | | | | | | | | | | |
| Standby power consumption | W | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | |
| Power consumption | W | 2 567 | 2 626 | 2 430 | 3 225 | 3 314 | 3 038 | 4 179 | 4 189 | 3 949 | |
| Apparent power consumption | VA | 2 702 | 2 764 | 2 558 | 3 395 | 3 488 | 3 198 | 4 399 | 4 410 | 4 157 | |
| Power factor | - | 0,95 | 0,95 | 0,95 | 0,95 | 0,95 | 0,95 | 0,95 | 0,95 | 0,95 | |
| Inrush current | A | Negligible | Negligible | Negligible | Negligible | Negligible | Negligible | Negligible | Negligible | Negligible | |
| Output ripple | % RMS | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | |
| Efficiency (at rated power and no cables) | % | 91 | 92 | 92 | 91 | 92 | 92 | 91 | 92 | 92 | |
| PROPERTIES | | | | | | | | | | | |
| Ingress protection | IP | IP20 | IP20 | IP20 | IP20 | IP20 | IP20 | IP20 | IP20 | IP20 | |
| Ambient temperature range (at full capacity) | °C | -5 to +40 | -5 to +40 | -5 to +40 | -5 to +40 | -5 to +40 | -5 to +40 | -5 to +40 | -5 to +40 | -5 to +40 | |
| Ambient max temp (with reduced capacity) | °C | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | |
| Cooling | - | Fan | Fan | Fan | Fan | Fan | Fan | Fan | Fan | Fan | |
| Short circuit protection | - | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | |
| Wrong polarity protection | - | Fuse | Fuse | Fuse | Fuse | Fuse | Fuse | Fuse | Fuse | Fuse | |
| Cabinet type | - | S16 | S16 | S16 | S16 | S16 | S16 | S16 | S16 | S16 | |
| Certifications | - | CE | CE | UL | CE | CE | UL | CE | CE | UL | |
| HMI | - | LED | LED | LED | LED | LED | LED | LED | LED | LED | |
| HMI Language | - | - | - | - | - | - | - | - | - | - | |
| Radio communication | - | No | No | No | No | No | No | No | No | No | |
| Charging curve set (specification tab) | - | See website | See website | See website | See website | See website | See website | See website | See website | See website | |
| I/O-cards | - | No | No | No | No | No | No | No | No | No | |
| Accessories (accessories tab) | - | See website | See website | See website | See website | See website | See website | See website | See website | See website | |
| CHARGING TIMES (Charging Curve: LK10-18 with Chemical Acid Circulation) | | | | | | | | | | | |
| 6 h | Ah C5 | 459 | 459 | 459 | 574 | 574 | 574 | 746 | 746 | 746 | |
| 8 h | Ah C5 | 665 | 665 | 665 | 833 | 833 | 833 | 1083 | 1083 | 1083 | |
| 10 h | Ah C5 | 887 | 887 | 887 | 1112 | 1112 | 1112 | 1446 | 1446 | 1446 | |
| 12 h | Ah C5 | 1220 | 1220 | 1220 | 1532 | 1532 | 1532 | 1992 | 1992 | 1992 | |
| CHARGER DIMENSIONS | | | | | | | | | | | |
| Charger weight excl. cables | kg | 6,7 | 6,7 | 6,7 | 6,7 | 6,7 | 6,7 | 6,7 | 6,7 | 6,7 | |
| Charger weight incl. cables | kg | 9,1 | 9,1 | 9,1 | 9,7 | 9,7 | 9,7 | 10,8 | 10,6 | 10,6 | |
| Dimensions | - | See drawing | See drawing | See drawing | See drawing | See drawing | See drawing | See drawing | See drawing | See drawing | |
| Fixing center points | - | See drawing | See drawing | See drawing | See drawing | See drawing | See drawing | See drawing | See drawing | See drawing | |
| Min spacing required | mm | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | |
| SHIPPING DIMENSIONS | | | | | | | | | | | |
| Box height | mm | 270 | 270 | 270 | 270 | 270 | 270 | 270 | 270 | 270 | |
| Box width | mm | 330 | 330 | 330 | 330 | 330 | 330 | 330 | 330 | 330 | |
| Box depth | mm | 460 | 460 | 460 | 460 | 460 | 460 | 460 | 460 | 460 | |
| Shipping weight | kg | 10,3 | 10,3 | 10,3 | 10,9 | 10,9 | 10,9 | 12,0 | 11,7 | 11,7 | |

TECHNICAL DATA

SHARP 50 BATTERY CHARGER

STATED DATA ACCORDING TO MICROPOWER STANDARD

| VARIABLE | UNIT | | | | | | | | | | |
|--|-------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--|
| Part number | - | SP3343 | SP3349 | PS3346 | SP3383 | SP3389 | PS3386 | SP3433 | SP3439 | PS3436 | |
| Model | - | SHARP 50 | SHARP 50 | SHARP 50 | SHARP 50 | SHARP 50 | SHARP 50 | SHARP 50 | SHARP 50 | SHARP 50 | |
| Type | - | 36V/60A | 36V/60A | 36V/60A | 36V/80A | 36V/80A | 36V/80A | 36V/105A | 36V/105A | 36V/105A | |
| Output voltage | V | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | |
| Output current (at 2,4 Vpc) | A | 60 | 60 | 60 | 80 | 80 | 80 | 105 | 105 | 105 | |
| MAINS DATA | | | | | | | | | | | |
| Mains phase | - | 3 Phase | 3 Phase | 3 Phase | 3 Phase | 3 Phase | 3 Phase | 3 Phase | 3 Phase | 3 Phase | |
| Mains voltage supply | V | 200-240 | 380-440 | 480-480 | 200-240 | 380-440 | 480-480 | 200-240 | 380-440 | 480-480 | |
| Mains current (at min rated mains V) | A | 8,6 | 4,7 | 3,5 | 11,5 | 6,3 | 4,6 | 15,2 | 8,2 | 6,1 | |
| Mains current (at max rated mains V) | A | 7,1 | 4,1 | - | 9,5 | 5,4 | - | 12,7 | 7,1 | - | |
| Max mains fuse | A | 25 | 16 | 16 | 25 | 16 | 16 | 25 | 16 | 16 | |
| Mains cable area | mm2 | 4x1,5 | 4x1,5 | 4xAWG14 | 4x2,5 | 4x1,5 | 4xAWG14 | 4x2,5 | 4x1,5 | 4xAWG14 | |
| Mains cable length | m | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| Mains connector (included) | - | CEE16 (Blue) | CEE16 (Red) | NEMA L16-30P | CEE16 (Blue) | CEE16 (Red) | NEMA L16-30P | CEE16 (Blue) | CEE16 (Red) | NEMA L16-30P | |
| BATTERY CONNECTION | | | | | | | | | | | |
| Battery cable | mm2 | 2x16 | 2x16 | 2xAWG6 | 2x25 | 2x25 | 2xAWG4 | 2x35 | 2x35 | 2xAWG2 | |
| Battery cable length | m | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| Battery connector (not included) | - | User defined | User defined | User defined | User defined | User defined | User defined | User defined | User defined | User defined | |
| ELECTRIC DATA | | | | | | | | | | | |
| Standby power consumption | W | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | |
| Power consumption | W | 2 838 | 2 954 | 2 753 | 3 785 | 3 939 | 3 671 | 5 010 | 5 127 | 4 818 | |
| Apparent power consumption | VA | 2 988 | 3 110 | 2 898 | 3 984 | 4 147 | 3 864 | 5 274 | 5 397 | 5 071 | |
| Power factor | - | 0,95 | 0,95 | 0,95 | 0,95 | 0,95 | 0,95 | 0,95 | 0,95 | 0,95 | |
| Inrush current | A | Negligible | Negligible | Negligible | Negligible | Negligible | Negligible | Negligible | Negligible | Negligible | |
| Output ripple | % RMS | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | |
| Efficiency (at rated power and no cables) | % | 91 | 92 | 93 | 91 | 92 | 93 | 91 | 92 | 93 | |
| PROPERTIES | | | | | | | | | | | |
| Ingress protection | IP | IP20 | IP20 | IP20 | IP20 | IP20 | IP20 | IP20 | IP20 | IP20 | |
| Ambient temperature range (at full capacity) | °C | -5 to +40 | -5 to +40 | -5 to +40 | -5 to +40 | -5 to +40 | -5 to +40 | -5 to +40 | -5 to +40 | -5 to +40 | |
| Ambient max temp (with reduced capacity) | °C | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | |
| Cooling | - | Fan | Fan | Fan | Fan | Fan | Fan | Fan | Fan | Fan | |
| Short circuit protection | - | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | |
| Wrong polarity protection | - | Fuse | Fuse | Fuse | Fuse | Fuse | Fuse | Fuse | Fuse | Fuse | |
| Cabinet type | - | S16 | S16 | S16 | S16 | S16 | S16 | S16 | S16 | S16 | |
| Certifications | - | CE | CE | UL | CE | CE | UL | CE | CE | CE | |
| HMI | - | LED | LED | LED | LED | LED | LED | LED | LED | LED | |
| HMI Language | - | - | - | - | - | - | - | - | - | - | |
| Radio communication | - | No | No | No | No | No | No | No | No | No | |
| Charging curve set (specification tab) | - | See website | See website | See website | See website | See website | See website | See website | See website | See website | |
| I/O-cards | - | No | No | No | No | No | No | No | No | No | |
| Accessories (accessories tab) | - | See website | See website | See website | See website | See website | See website | See website | See website | See website | |
| CHARGING TIMES (Charging Curve: LK10-18 with Chemical Acid Circulation) | | | | | | | | | | | |
| 6 h | Ah C5 | 344 | 344 | 344 | 459 | 459 | 459 | 603 | 603 | 603 | |
| 8 h | Ah C5 | 500 | 500 | 500 | 665 | 665 | 665 | 875 | 875 | 875 | |
| 10 h | Ah C5 | 667 | 667 | 667 | 887 | 887 | 887 | 1168 | 1168 | 1168 | |
| 12 h | Ah C5 | 919 | 919 | 919 | 1220 | 1220 | 1220 | 1401 | 1401 | 1401 | |
| CHARGER DIMENSIONS | | | | | | | | | | | |
| Charger weight excl. cables | kg | 6,7 | 6,7 | 6,7 | 6,7 | 6,7 | 6,7 | 6,7 | 6,7 | 6,7 | |
| Charger weight incl. cables | kg | 8,5 | 8,5 | 8,5 | 9,4 | 9,1 | 9,1 | 10,0 | 9,7 | 9,7 | |
| Dimensions | - | See drawing | See drawing | See drawing | See drawing | See drawing | See drawing | See drawing | See drawing | See drawing | |
| Fixing center points | - | See drawing | See drawing | See drawing | See drawing | See drawing | See drawing | See drawing | See drawing | See drawing | |
| Min spacing required | mm | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | |
| SHIPPING DIMENSIONS | | | | | | | | | | | |
| Box height | mm | 270 | 270 | 270 | 270 | 270 | 270 | 270 | 270 | 270 | |
| Box width | mm | 330 | 330 | 330 | 330 | 330 | 330 | 330 | 330 | 330 | |
| Box depth | mm | 460 | 460 | 460 | 460 | 460 | 460 | 460 | 460 | 460 | |
| Shipping weight | kg | 9,7 | 9,7 | 9,7 | 10,5 | 10,3 | 10,3 | 11,1 | 10,9 | 10,9 | |

TECHNICAL DATA

SHARP 50 BATTERY CHARGER

STATED DATA ACCORDING TO MICROPOWER STANDARD

| VARIABLE | UNIT | | | | | | |
|---|-------|--------------|--------------|--------------|--------------|--------------|--------------|
| Part number | - | SP4343 | SP4349 | PS4346 | SP4383 | SP4389 | PS4386 |
| Model | - | SHARP 50 | SHARP 50 | SHARP 50 | SHARP 50 | SHARP 50 | SHARP 50 |
| Type | - | 48V/60A | 48V/60A | 48V/60A | 48V/80A | 48V/80A | 48V/80A |
| Output voltage | V | 48 | 48 | 48 | 48 | 48 | 48 |
| Output current (at 2,4 Vpc) | A | 60 | 60 | 60 | 80 | 80 | 80 |
| MAINS DATA | | | | | | | |
| Mains phase | - | 3 Phase | 3 Phase | 3 Phase | 3 Phase | 3 Phase | 3 Phase |
| Mains voltage supply | V | 200-240 | 380-440 | 480-480 | 200-240 | 380-440 | 480-480 |
| Mains current (at min rated mains V) | A | 11,6 | 6,1 | 4,6 | 15,5 | 8,2 | 6,1 |
| Mains current (at max rated mains V) | A | 9,7 | 5,3 | - | 12,9 | 7,1 | - |
| Max mains fuse | A | 25 | 16 | 16 | 25 | 16 | 16 |
| Mains cable area | mm2 | 4x2,5 | 4x1,5 | 4xAWG14 | 4x2,5 | 4x1,5 | 4xAWG14 |
| Mains cable length | m | 3 | 3 | 3 | 3 | 3 | 3 |
| Mains connector (included) | - | CEE16 (Blue) | CEE16 (Red) | NEMA L16-30P | CEE16 (Blue) | CEE16 (Red) | NEMA L16-30P |
| BATTERY CONNECTION | | | | | | | |
| Battery cable | mm2 | 2x16 | 2x16 | 2xAWG6 | 2x25 | 2x25 | 2xAWG4 |
| Battery cable length | m | 3 | 3 | 3 | 3 | 3 | 3 |
| Battery connector (not included) | - | User defined | User defined | User defined | User defined | User defined | User defined |
| ELECTRIC DATA | | | | | | | |
| Standby power consumption | W | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| Power consumption | W | 3 817 | 3 814 | 3 613 | 5 101 | 5 127 | 4818 |
| Apparent power consumption | VA | 4 018 | 4 015 | 3 804 | 5 369 | 5 397 | 5071 |
| Power factor | - | 0,95 | 0,95 | 0,95 | 0,95 | 0,95 | 0,95 |
| Inrush current | A | Negligible | Negligible | Negligible | Negligible | Negligible | Negligible |
| Output ripple | % RMS | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 |
| Efficiency (at rated power and no cables) | % | 92 | 93 | 93 | 92 | 93 | 93 |
| PROPERTIES | | | | | | | |
| Ingress protection | IP | IP20 | IP20 | IP20 | IP20 | IP20 | IP20 |
| Ambient temperature range (at full capacity) | °C | -5 to +40 | -5 to +40 | -5 to +40 | -5 to +40 | -5 to +40 | -5 to +40 |
| Ambient max temp (with reduced capacity) | °C | 50 | 50 | 50 | 50 | 50 | 50 |
| Cooling | - | Fan | Fan | Fan | Fan | Fan | Fan |
| Short circuit protection | - | Yes | Yes | Yes | Yes | Yes | Yes |
| Wrong polarity protection | - | Fuse | Fuse | Fuse | Fuse | Fuse | Fuse |
| Cabinet type | - | S16 | S16 | S16 | S16 | S16 | S16 |
| Certifications | - | CE | CE | UL | CE | CE | UL |
| HMI | - | LED | LED | LED | LED | LED | LED |
| HMI Language | - | - | - | - | - | - | - |
| Radio communication | - | No | No | No | No | No | No |
| Charging curve set (specification tab) | - | See website | See website | See website | See website | See website | See website |
| I/O-cards | - | No | No | No | No | No | No |
| Accessories (accessories tab) | - | See website | See website | See website | See website | See website | See website |
| CHARING TIMES (Charging Curve: LK10-18 with Chemical Acid Circulation) | | | | | | | |
| 6 h | Ah C5 | 344 | 344 | 344 | 459 | 459 | 459 |
| 8 h | Ah C5 | 494 | 494 | 494 | 665 | 665 | 665 |
| 10 h | Ah C5 | 660 | 660 | 660 | 880 | 880 | 880 |
| 12 h | Ah C5 | 919 | 919 | 919 | 1220 | 1220 | 1220 |
| CHARGER DIMENSIONS | | | | | | | |
| Charger weight excl. cables | kg | 6,7 | 6,7 | 6,7 | 6,7 | 6,7 | 6,7 |
| Charger weight incl. cables | kg | 8,7 | 8,5 | 8,5 | 9,4 | 9,1 | 9,1 |
| Dimensions | - | See drawing | See drawing | See drawing | See drawing | See drawing | See drawing |
| Fixing center points | - | See drawing | See drawing | See drawing | See drawing | See drawing | See drawing |
| Min spacing required | mm | 100 | 100 | 100 | 100 | 100 | 100 |
| SHIPPING DIMENSIONS | | | | | | | |
| Box height | mm | 270 | 270 | 270 | 270 | 270 | 270 |
| Box width | mm | 330 | 330 | 330 | 330 | 330 | 330 |
| Box depth | mm | 460 | 460 | 460 | 460 | 460 | 460 |
| Shipping weight | kg | 9,9 | 9,7 | 9,7 | 10,5 | 10,3 | 10,3 |