

## **TECHNICAL DATA**

## **SHARP 20 BATTERY CHARGERS**

## STATED DATA ACCORDING TO MICROPOWER STANDARD

Part number	924231
Model	SHARP 20
Туре	24V/45A
MAINS DATA (50/60HZ)	
Output Voltage [V]	24
Output Current [A]	45
Number of phases	1
Rated Voltage range [V]	220-240
Current at nominal voltage [A]	6,5
Recommended supply fuse [A]	10
Supply cable area	3x1,5
Supply cable length [m]	2,5
Typical Supply Connector	10A Schuko
Output cable cross-section	2x10
BATTERY CONNECTION	
Output cable cross-section	2x10
Output cable terminals (in unit)	M6
Output cable length [m]	2
Typical Output connector	User defined
Output Voltage [V]	24
ELECTRIC DATA	
Standby Power Consumption [W]	<5
Power Consumption [W]	1488
Apparent Power Consumption [VA]	1503

Interal ournet, do not trigo foce of class [A]         Negligble           Output Rigop         .1           Enteining (at rated power and no cables) [%]         .9           PROFERTES         .720           Ambient temperature range (at full cupout power) [deg (C]         .50 +40           Ambient temperature range (at full cupout power) [deg (C]         .50 +40           Colling: 1-frait_> Convection         Fan           Stort Circuit Protection         Ves           Wong Pularity Protection         Ves           Colling: 1-frait_> Convection         Pole           Mildian taxue provide (C)         Ves           Vers         Pole           Control Circuit Protection         Ves           More Pularity Protection         Ves           Control Circuit Protection         Ves           Mildian Language         .           Attil Language         .           Reporting Carve Set         Ves           Colleging Carve Set         No           Clarking Carve Set         Set           Clarking Carve Set	Power Factor	0,99
Bigener (af rated power and no cable) [%]       89         PROPERTIES       P20         Ingress protection       P20         Ambient tempersture range (af full output power) [deg C]       50         Colling: I-Fan, 2- Convection       Fan         Start Circuit Protection       Fan         Start Circuit Protection       Fes         Wrong Polarity Protection       Festorale         Colling: I-Fan, 2- Convection       Festorale         Start Circuit Protection       Festorale         Wrong Polarity Protection       Festorale         Cablent Type       P6         Chronic Protection       P6         Robust Type       For Source         Hull Language       -         Robust Circuit Protection       P0         Robust Circuit Protection	Inrush current, do not tripp fuse of class [A]	Negligible
PROPERTIES           Ingress protection         P20           Antient temperture range (at full output power) (deg C)         50           Cooling: 1-Fan, 2- Convection         Fan           Stort Circuit Protection         Fan           Stort Circuit Protection         Ves           Cooling: 1-Fan, 2- Convection         Electronic           Stort Circuit Protection         Ves           Wrag Polarity Protection         Electronic           Cabinet Type         P6           Cabinet Type         Fan           Hul         ED           Hul Canguage         -           Roperting         No           Robust Capany Edu Capany         Pace           Robust Capany Edu Capany         No           Robust Capany Edu Capany         No           Robust Capany Edu Capany         No           Cabinet Type         No           Cabinet Sopany/Edu Capany         No           Cabinet Sopany/Edu Capany         No           Robust capany/Edu Capany         Social Capany           Robus capany/Ed	Output Ripple	<1
Ingress prototionP20Anheint temperature range (at till output power) (log C)5 to 40Anheint temperature range (at till output power) (log C)50Colling: Infan, 2- ConvectionFaStort Circuit ProtectionFaStort Circuit ProtectionFaColling: Infan, 2- ConvectionFaColling: Infan, 2- ConvectionFaStort Circuit ProtectionFaCircuit Protection	Efficiency (at rated power and no cables) [%]	89
Ambient temperature range (at full output power) [deg C] Antibient max temp (with reduced output power) [deg C] Cooling: 1-Fan, 2- Convection Cooling: 1-Fan, 2- Convection Short Circuit Protection Control Short Circuit Protection Cooling: 1-Fan, 2- Convection	PROPERTIES	
Ambient max temp (with reduced output power) [deg C]         60           Cooling: I-Fan, 2- Connection         Fan           Short Circuit Protection         Yes           Wrong Polarity Protection         Electronic           Cabins Type         Fo           Cabins Type         Fo           Cabins Type         Fo           Chritections         Electronic           HMI         ED           Halangaage         -           Raporting         No           Redo Communication         No           Clorards         Io40.06 & 20.09           I/C-cards         No           Clarards         So           Clarards         So           Clarards         No	Ingress protection	IP20
ContractFanContractYesWinder ProtectionElectronicCabinet TypeP6CartificationsElectronicHMIED0HMIElectronicReportingNoReportingNoCabinet TypeNoCardinationNoCardinationNoCardinationNoCardinationNoCardinationNoCardinationNoCardinationNoCardinationNoCardinationNoCardinationNoCardinationNoCardinationNoCardinationNoCardinationNoCardinationNoCardinationNoCardinationNoCardinationNoCardinationNoCardinationNoCardinationNoCardinationNoCardinationNoCardinationSecondCardinationSecondCardinationSecondCardinationSecondCardinationSecondCardinationSecondCardinationSecondCardinationSecondCardinationSecondCardinationSecondCardinationSecondCardinationSecondCardinationSecondCardinationSecondCardinationSecondCardinationSecond <t< td=""><td>Ambient temperature range (at full output power) [deg C]</td><td>-5 to +40</td></t<>	Ambient temperature range (at full output power) [deg C]	-5 to +40
Short Diracit Protection         Yes           Wrong Polarity Protection         Electonic           Cabinet Type         P6           Cabinet Type         P6           Cartifications         IE           HM         Electonic           HII Language         IE           Reporting         No           Reporting         No           Radio Communication         No           IV-corads         IO-04,06 & 20-09           IC-corads         No           IC-corads         No           IL         No           Reporting         No           IL         Standard Scope           IL         No           IC-corads         No           IL         No           IL         No           IL         No           IL         No           IL         Standard Scope	Ambient max temp (with reduced output power) [deg C]	50
Wrag Polarity Protection         Electronic           Cabinet Type         P6           Certifications         Europation           Entifications         LED           HMI         LED           HMI Anguage         -           Reporting         No           Reporting         No           Radio Communication         No           Charging Curve Set         0:04068 20:09           I/C-carcds         No           CE         Yes           DL         No           CE         No           CHARGING TIMES         Yes           F Hours capah/Sh         29           10 Hours capah/Sh         29           11 Hours capah/Sh         Sel           12 Hours capah/Sh         Sel           13 Hours capah/Sh         Sel           CHARGER DIMENSIONS         Yes	Cooling: 1=Fan, 2= Convection	Fan
Cabinet Type         P6           Cortifications         E           HMI         LED           HMI Language         -           Reporting         No           Radio Communication         No           Itzling Curve Set         10-04.06 & 20-09           I/C-cards         No           CE         Yes           IL         No           CHARGING TIMES         Ves           6 Hours cap.ah/5h         29           10 Hours cap.ah/5h         29           10 Hours cap.ah/5h         345           10 Hours cap.ah/5h         58           CHARGER DIMENSIONS         Sea           Weight excl. cables [kg]         Yes	Short Circuit Protection	Yes
Certifications         HM       LED         HM Language       -         Reporting       No         Radio Communication       No         Charging Curve Set       0-04,06 & 20-09         L/O-cards       No         CE       Ves         LQ       No         CE       Ves         LQ       No         Delayse path/Sh       No         1 Hours cap.ah/Sh       S29         10 Hours cap.ah/Sh       29         10 Hours cap.ah/Sh       S10         12 Hours cap.ah/Sh       S10         12 Hours cap.ah/Sh       S10         12 Hours cap.ah/Sh       S10         Vegit exct. cables [kg]       S10         Weight exct. cables [kg]       S10	Wrong Polarity Protection	Electronic
HMI Anguage     HMI Language     HMI Language     HMI Language     Aporting     Roporting     Ano     An	Cabinet Type	P6
HM Language       -         Reporting       No         Radio Communication       No         Charging Curve Set       10-04.06 & 20-09         I/O-cards       No         CE       Yes         UL       No         CHARGING TIMES       Ves         F Hours cap.ah/5h       29         10 Hours cap.ah/5h       345         12 Hours cap.ah/5h       598         Tel Yes       Set         FLARGER DIMENSIONS       Ves         Veght net. cables [kg]       Yes	Certifications	
ReportingNoRedo CommunicationNoCharging Curve Set10-04.06 & 20-09I/O-cardsNoI/O-cardsNoCEYesUNoCHARCING TIMES296 Hours cap.ah/5h2910 Hours cap.ah/5h34510 Hours cap.ah/5hS98CHARCER DIMENSIONSYesVieght excl. cables [kg]Yes	НМІ	LED
Radio CommunicationNoCharging Curve Set10-04.06 & 20-09I/O-cardsNoCEYesULNoCHARGING TIMES2096 Hours cap.ah/5h2910 Hours cap.ah/5h34510 Hours cap.ah/5h59812 Hours cap.ah/5h598CHARGER DIMENSIONSYesVieght text. cables [kg]Yes	HMI Language	-
Charging Curve Set       10-04,06 & 20-09         I/O-cards       No         CE       Yes         UL       No         CHARGING TIMES         6 Hours cap.ah/5h       299         8 Hours cap.ah/5h       345         10 Hours cap.ah/5h       598         CHARGER DIMENSIONS         Weight excl. cables [kg]	Reporting	No
I/O-cardsNoCFYesULNoCHARGING TIMES6 Hours cap.ah/Sh298 Hours cap.ah/Sh34510 Hours cap.ah/Sh3912 Hours cap.ah/Sh598CHARGER DIMENSIONSVeight excl. cables [kg]	Radio Communication	No
CE       Yes         UL       No         CHARGING TIMES         6 Hours cap.ah/5h       29         8 Hours cap.ah/5h       345         10 Hours cap.ah/5h       411         12 Hours cap.ah/5h       598         CHARGER DIMENSIONS         Veight excl. cables [kg]       Yes	Charging Curve Set	10-04,06 & 20-09
UL         No           CHARGING TIMES           6 Hours cap.ah/5h         29           8 Hours cap.ah/5h         345           10 Hours cap.ah/5h         345           12 Hours cap.ah/5h         58           CHARGER DIMENSIONS           Veight excl. cables [kg]         Veight excl. cables [kg]	I/O-cards	No
CHARGING TIMES6 Hours cap.ah/5h2298 Hours cap.ah/5h34510 Hours cap.ah/5h47112 Hours cap.ah/5h598CHARGER DIMENSIONSVieight excl. cables [kg]Vieight incl. cables [kg]	CE	Yes
6 Hours cap.ah/5h2298 Hours cap.ah/5h34510 Hours cap.ah/5h47112 Hours cap.ah/5h598CHARGER DIMENSIONSWeight excl. cables [kg]	UL	No
8 Hours cap.ah/5h       345         10 Hours cap.ah/5h       471         12 Hours cap.ah/5h       598         CHARGER DIMENSIONS         Weight excl. cables [kg]       Veight incl. cables [kg]	CHARGING TIMES	
10 Hours cap.ah/5h       471         12 Hours cap.ah/5h       598         CHARGER DIMENSIONS         Weight excl. cables [kg]	6 Hours cap.ah/5h	229
12 Hours cap.ah/5h     598       CHARGER DIMENSIONS       Weight excl. cables [kg]     Veight incl. cables [kg]	8 Hours cap.ah/5h	345
CHARGER DIMENSIONS Weight excl. cables [kg] Weight incl. cables [kg]	10 Hours cap.ah/5h	471
Weight excl. cables [kg] Weight incl. cables [kg]	12 Hours cap.ah/5h	598
Weight incl. cables [kg]	CHARGER DIMENSIONS	
	Weight excl. cables [kg]	
Outer Dimensions Height [mm] 295	Weight incl. cables [kg]	
	Outer Dimensions Height [mm]	295

Outer Dimensions Width [mm]	138
Outer Dimensions Depth [mm]	89
Min Spacing Required	150
SHIPPING DIMENSIONS	
Shipping Weight [kg]	3
Box Height [mm]	390
Box Width [mm]	250
Box Depth [mm]	140
CHARGING	
Charging Ionic	LK10-04 Chemical Acid Circulation (Ionic)
Charging Standard	LK10-06 Standard Curve
Charging Gel	LK20-09
Charging Li-Ion	0
Charging AGM	LK20-09
Moisture Resistance	No
Dusty Environment	No
Outdoor use	No
Cold store	
	No

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