

Discharging capacity, examples

12 V battery (6 cells) ²⁾

Final voltage	Constant current	Constant power
1.80 V/cell (10.8 V)	0 – 121 A	0 – 1.31 kW
1.75 V/cell (10.5 V)	0 – 117 A	0 – 1.23 kW
1.67 V/cell (10.0 V)	0 – 110 A	0 – 1.10 kW

24 V battery (12 cells) ²⁾

1.80 V/cell (21.6 V)	0 – 270 A	0 – 5.8 kW
1.75 V/cell (21.0 V)	0 – 266 A	0 – 5.59 kW
1.60 V/cell (19.2 V)	0 – 241 A	0 – 4.63 kW

48 V battery (24 cells) ²⁾

1.80 V/cell (43.2 V)	0 – 270 A	0 – 11.6 kW
1.75 V/cell (42.0 V)	0 – 270 A	0 – 11.3 kW
1.60 V/cell (38.4 V)	0 – 259 A	0 – 9.9 kW

2) 2.15 V per cell when test starts

Specifications TXL830/850

Specifications are valid at nominal input voltage and an ambient temperature of +25°C, (77°F). Specifications are subject to change without notice.

Environment

Application field The instrument is intended for use in high-voltage substations and industrial environments.

Temperature

Operating 0°C to +40°C (32°F to +104°F)

Storage & transport -40°C to +70°C (-40°F to +158°F)

Humidity

5% – 95% RH, non-condensing

CE-marking

LVD 2006/95/EC

EMC 2004/108/EC

General

Mains voltage 100 – 240 V AC, 50/60 Hz

Power consumption 75 W (max)

Protection Thermal cut-outs, automatic overload protection

Dimensions

Instrument 210 x 353 x 600 mm
(8.3" x 13.9" x 23.6")

Transport case 265 x 460 x 750 mm
(10.4" x 18.1" x 29.5")

Weight

13 kg (28.7 lbs)

21.4 kg (47.2 lbs) with transport case

Cable sets for TXL830/850 2 x 3 m (9.8 ft), 70 mm², 270 A, with cable lug. Max. 100 V. 5 kg (11 lbs)

Load section

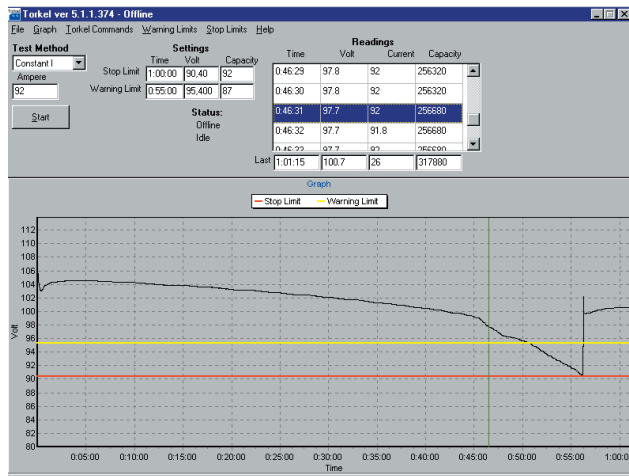
	TXL830	TXL850
Max. voltage (DC)	28 V	56 V
Max. current	300 A	300 A
Max. power	8.3 kW	16.4 kW

Internal resistance, 3-position selector

Position 1	TXL830	TXL850
<i>Current</i>	0.275 Ω	0.55 Ω
<i>100 A</i>	at 27.6 V (12 x 2.3 V)	at 55.2 V (24 x 2.3 V)
<i>78.5 A</i>	at 21.6 V (12 x 1.8 V)	at 43.2 V (24 x 1.8 V)
<i>50.1 A</i>	–	–
<i>39.2 A</i>	–	–
Position 2	TXL830	TXL850
<i>Current</i>	0.138 Ω	0.275 Ω
<i>200 A</i>	at 27.6 V	at 55.2 V (24 x 2.3 V)
<i>156 A</i>	at 21.6 V	43.2 V (24 x 1.8 V)–
Position 3	TXL830	TXL850
<i>Current</i>	0.092 Ω	0.184 Ω
<i>300 A</i>	at 27.6 V	at 55.2 V (24 x 2.3 V)
<i>235 A</i>	at 21.6 V	43.2 A (24 x 1.8 V)
<i>100 A</i>	–	–
<i>78.4 A</i>	–	–

Additional equipment

TORHEL Win



- Shows the complete voltage curve
- Last recorded time, voltage, current and discharged capacity
- Scroll-window for all recorded values
- Remote control of TORHEL
- Report functions

Extra loads



- There are two extra loads available, TXL830 and TXL850

Clamp-on-ammeters



- Clamp-on ammeters, 200 A DC and 1000 A DC
- To measure current in circuit outside TORHEL

BVM



- Automates battery voltage measurement during capacity tests
- "Daisy-chain" design allows expandability up to 120 units
- High accuracy and stability for precise data collection
- Integrates with TORHEL Win and PowerDB Test Data Management software
- For complete information see BVM data sheet

Included accessories

Cable set



Cable set, GA-00554

Ordering information

Item	Art. No.
TORTEL 820	
Complete with:	
Cable set GA-00554	
Transport case GD-00054	BS-49092
Optional	
TORTEL Win PC software	BS-8208X
Extra loads	
TXL830	BS-59093
TXL850	BS-59095
Cable sets	
Cable set for TXL830 and TXL850 2 x 3 m, 70 mm ² , with cable lug. Max 100 V 270 A. Weight: 5.0 kg (11 lbs)	GA-00554
Sensing lead set	
Cable set for measuring voltage at battery terminals. 2 x 5 m (16.4 ft)	GA-00210
Clamp-on ammeters	
DC clamp-on ammeter, 200 A To measure current in circuit outside TORTEL	XA-12992
DC clamp-on ammeter, 1000 A To measure current in circuit outside TORTEL	XA-12990
BVM	
<i>Including:</i> Dolphin clips, Power & signal connector, Power supply, Connection cables and Carrying case	
BVM150	
With TORTEL Win software System of 16 BVM units	CJ-59092
BVM300	
With TORTEL Win software System of 31 BVM units	CJ-59093
BVM600	
With TORTEL Win software System of 61 BVM units	CJ-59096
BVM150	
With PowerDB software System of 16 BVM units	CJ-59192
BVM300	
With PowerDB software System of 31 BVM units	CJ-59193
BVM600	
With PowerDB software System of 61 BVM units	CJ-59196