

# Fluke Process Tools Accessories

## Technical Data

### Pressure Pumps

#### 700PTP-1 Pneumatic Test Pump

**Description:** The Fluke-700PTP-1 pneumatic test pump is capable of supplying pressures up to 600 psi, 40 bar.

**Application:** For use with 700 series pressure modules or test gauges. Can directly connect modules or test gauges to the reference port consolidating two separate pieces when performing pressure calibration and testing. Can also be used with 717 pressure calibrators. Ideal for calibrating pressure transmitters, pressure switches and pressure gauges up to 600 PSI/40 bar.

#### Features:

- Pump can be easily cleaned without disassembly.
- The vernier can be used as a stand-alone low pressure calibration source
- The Fluke 700PTP-1 has two pressure ports allowing simultaneous connection:
- 1/4" -NPT female fitting for the reference gauge or pressure module
- 1/4" NPT female fitting for the unit under test
- Adjustable stroke length can be set to limit the pressure per stroke

#### Included:

- 1/4 in NPT male to 1/4 in BSP female
- 1 meter of hose

- (2) 1/8 in NPT male quick connects
- 1/8 NPT female to 1/4 in BSP female
- Seal Kit
- Instruction sheet
- Size:** L x W x D: 220 x 122 x 89 mm
- Weight:** 467 g
- Warranty:** One year
- Material:** Wetted materials: aluminum, silicon, neoprene, stainless steel, Buna-N

#### Fluke 700HTP-1 Hydraulic Test Pump

**Description:** The Fluke 700HTP-1 is a hand operated hydraulic pressure pump designed to generate calibration pressures up to 10,000 psi/690 bar. Designed for use with Fluke-700 series high pressure modules such as the Fluke-700P09, 700P29, 700P30 and 700P31.

**Application:** Ideal for calibration when connected to a Fluke high pressure module via the reference port. The 700HTP-1 uses distilled water or mineral-based hydraulic oil as a source for calibration of high pressure input devices such as pressure transmitters or pressure gauges. Can also be used with Fluke 717 pressure calibrators.

#### Features:

- Variable size stroke adjustment, allows the user to vary the volume and pressure per stroke
- Integral pressure adjustment vernier knob for fine pressure adjustment.

*Use Fluke accessories to enhance the power of your Fluke Process Calibrators*



Fluke 700PTP-1



Fluke 700HTP-1

## Pressure Pumps (continued)

- Direct connection to pressure modules consolidates two separate pieces into one when performing pressure calibration and testing
- Two 1/4 inch NPT pressure ports, one for reference (pressure module or gauge), one for UUT
- Compatible with optional Fluke-700PRV pressure relief valve designed to protect pressure modules from over-pressure damage

**Note:** The user must provide a hose with appropriate end fittings to apply pressure from the UUT port to the calibration unit under test such as the Fluke-700HTH-1 hose kit.

### Included:

- 1/4 inch NPT to 1/4 inch NPT adapter to connect the reference gauge port on the pump body to the 1/4 NPT female fitting on Fluke 700P29, P30, and P31 pressure modules.
- (2) 1/4 inch NPT male to 1/4 inch BSP Female adapters
- 1/4 inch NPT Tee (installed)
- Instruction sheet

### Mechanical & General Specifications

**Size:** L x W x D:

241 x 155 x 66 mm

**Weight:** 580 g

**Warranty:** One year

**Material:** Wetted materials: 303 stainless steel, aluminum, polyurethane, PTFE, nitrile, and nylon



Fluke 700HTH-1

### Fluke 700PRV-1 Pressure Relief Valve Kit

**Description:** The Fluke 700PRV-1 consists of a relief valve settable from 725 to 5800 PSI (50 to 200 bar) to be used with the 700HTP-1 Hydraulic Test Pump. The 1/8" NPT male thread to fits directly into the Fluke 700HTP-1 pressure pump.

**Application:** To be used with the 700HTP-1 Hydraulic Test Pump. The 700PRV uses a multi-turn adjustment screw to set preload on internal disc springs. This relief valve will protect the most commonly used Fluke pressure modules and pressure instruments from damage due to accidental over-pressurization.

### Features:

- Adjustable from 725 to 5800 PSI (50 to 200 bar)
- Preset at 2,900 psi/200 bar)
- Repeatability to 10% of nominal setting.
- Installs directly into the 700HTP-1 pump

### Included:

- One adjustable relief valve
- Instruction sheet

### Mechanical & General Specifications

**Size:** 38 mm by 16 mm diameter

**Weight:** 46 g

**Warranty:** One year

**Material:** Type 303 stainless steel



Fluke 700LTP-1

### Fluke 700HTH-1 Hydraulic Test Hose

**Description:** The Fluke 700HTH-1 hydraulic test hose is a 10,000 psi, 690 bar working pressure test hose that features stainless steel and nylon construction for use in connecting a Fluke-700HTP-1 or other hydraulic test pump to a unit under test.

**Application:** The Fluke 700HTH-1 enables connection to both a Fluke pressure module and a calibration unit under test from a Fluke 700HTP-1 hydraulic test pump simultaneously. 700HTH-1 is compatible with water and non-corrosive oil.

### Features:

- Hose and fittings to connect directly to the Fluke 700HTP-1 test pressure port
- Includes plugs and caps to eliminate fluid loss in hose, eliminates the need to re-prime the hose.
- Self-sealing fittings with easy finger tight connections.
- Low volumetric expansion and a negligible pressure drop at rated pressures

### Included:

- Hose with (2) 1/4" NPT female output connections
- (2) adapters that to convert 1/4: NPT female to 1/4" NPT male (include sealing caps)
- 1/4 in NPT female to 1/4 in BSP male adapter
- Instruction sheet

## 29 Pressure Modules

Fluke offers a family of 29 Pressure Modules to address gage, differential, absolute, vacuum, and dual (compound) applications to 10,000 psi/700 bar.

For detailed specifications and applications, ask for Application Note Pressure Calibration Pub\_ID: 10188.

## Pressure and Calibration Accessories

### Mechanical & General Specifications

**Minimum bend radius:**  
60 mm

**Working temperature:**  
- 40 °C to + 120 °C

**Material:** Nylon, stainless steel, zinc, plated steel, and nitrile

**Dimensions:** 0.84 m long with-out adapter fittings

**Weight:** 412 g

**Warranty:** One year

### Fluke 700LTP-1 Low-pressure Test Pump

**Description:** The Fluke 700LTP-1 is a hand operated pressure pump designed to generate either vacuum to -13 psi/ -90 bar or pressures to 100 psi/ 6.9 bar. The Fluke 700LTP-1 has two pressure ports with quick fit connectors. Test hoses are terminated with 1/4-NPT female fittings that can be adapted using the BSP/ISO adapters.

**Application:** For use with 700 series pressure modules and 717 pressure calibrators. Ideal for low pressure applications requiring accurate low pressure testing.

### Ordering information

Model	Item	Description
Fluke-700PTP-1	2811774	Pneumatic test pump, -12 to 600 PSI
Fluke-700HTP-1	2811788	Hydraulic test pump, 0-10,000 PSI
Fluke-700PRV-1	2811808	Pressure relief valve for 700HTP
Fluke-700HTH-1	2811795	Hydraulic test hose, 10,000 PSI
Fluke-700LTP-1	2811763	Low pressure test pump, -12 to 100 PSI

#### Features:

- Pump can be easily cleaned without disassembly.
- Adjustable pressure release valve with slow-bleed capability
- Allows the slow release pressure at a controlled rate
- Slim design, easy to carry and use
- Quick fit connectors, one for the reference port for connection to a Fluke 700 series pressure module and one to connect to a unit under test

#### Included:

- (2) adapters to convert the reference and UUT port hose fitting to 1/4" BSP female
- Adapter to convert the reference port hose fitting to 1/4" NPT female for connection to 700 series pressure modules
- One seal kit

### Mechanical & General Specifications

**Size:** L x W x D:

150 x 100 x 32 mm

**Weight:** 226 g (pump only)

**Warranty:** One year

**Material:** Aluminum, silicon, neoprene, stainless steel, Buna-N

### Fluke 700ILF In-line Filter

**For use with:** Fluke 717 and 718 Pressure Calibrators

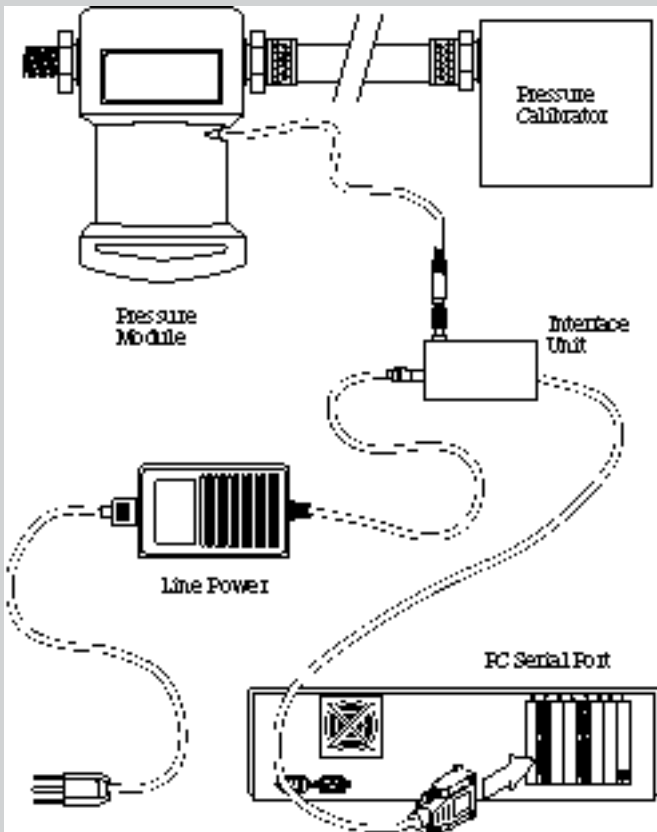
**Description:** Use to isolate calibrator from contact with liquids. Input is 1/8" NPT female. Output is 1/8" NPT Male.

**Application:** The Fluke 700ILF can be used to isolate the calibrator from incidental contact with fluids present in the gas medium being measured. Particularly useful with the 718 calibrator to help keep moisture or oils from contaminating the on-board pump. The 1/8" NPT male threaded output threads directly into the 717 and 718 calibrators. Maximum pressure is 100 psi. Burst pressure is 375 psi. Maximum flow is 10 SCFM and filtration to 1 micron.

**Included:** One disposable filter

**Dimensions:** 54 mm x 48 mm

**Weight:** 115 g



Fluke 700PCK

## Calibration and Process Calibrator Accessories

### Fluke 700PCK Pressure Calibration Kit

**For use with:** Fluke 700 Series Pressure Modules.

**Description:** The Fluke 700PCK makes it possible to calibrate your pressure modules at your facility using your own precision pressure standards.

**Application:** When installed on your PC, the Windows®-based software easily steps you through an as-found verification, a calibration adjustment, and an as-left verification.

Calibration data is captured for import to your database. A 386 or better PC running Windows 3.1 or better is required, along with a precision pressure standard with an uncertainty of less than 1/4 that of the pressure module being verified.

**Included:** The kit consists of a power supply, an interface adapter, appropriate cables, and Fluke 700PC Pressure Module Calibration Software.

**Warranty:** One year

### Fluke 787CAL Calibration Module

**For use with:** Fluke 787 ProcessMeter™ and MET/CAL Software, version 6.0.

**Description:** The Fluke 787CAL module permits users and service facilities to perform automated MET/CAL verifications and calibrations of the Fluke 787 ProcessMeter.™

**Application:** The calibration module provides a 9 volt dc supply to the 787. At the same time, it facilitates RS232 communication from the PC running MET/CAL to the 787 over the battery leads of the 787.

**Included:** A calibration manual, MET/CAL procedures, and an interface module that permits serial communication between a 787 and a PC.

**Note:** An installation of MET/CAL Calibration Software plus appropriate calibration equipment must be provided by the user.

Required Calibration Equipment for use with the Fluke 787CAL Calibration Accessory:  
Fluke Model 5500 or 5520 Calibrator  
HP3458 DMM or \*\*HP34401 DMM,  
Fluke 5440A-7002 Test Lead set  
Fluke RS43 Null Modem Cable  
Personal Computer, 486 or better,  
IBM compatible  
Fluke MET/CAL Calibration Software,  
Version 6.0 or later  
\*\*HP34401 for use only with 5520A only  
5500A requires HP3458 DMM

### Fluke 700-IV Current Shunt

**For use with:** Fluke 701, 702, and 740 Series Documenting Process Calibrators.

**Description:**

Conversion factor:

10 mV = 1 mA

Accuracy (% of input, 1 year):  
0.025%

Input current: 0 to 55 mA

Input resistance: 250Ω, nominal

Output resistance: 10Ω, nominal

Accuracy specification applies  
from +18°C and 28-50°C

Maximum input voltage: 30V dc

**Application:** Use the Fluke 700-IV Current Shunt to calibrate and troubleshoot mA/mA devices. On a 741 or 743 Documenting Process Calibrator, Source mA and Measure V dc. The custom units function of the calibrator automatically provides the correct conversion, and directly displays/captures the current in mA.

**Included:** Shunt, instruction sheet.

**Warranty:** One year

### Fluke 700BCW Bar Code Wand

**For use with:** Fluke 743

Documenting Process Calibrator.

**Description:** This Hewlett Packard HBSW-8200 Bar Code Wand reads eight common bar code symbologies. Code 39, Interleave 2 or 5, UPC A and E, EAN 8 and 13, Codabar, Code 128, Code 11, Code 93, and MSI Code. Programmable via bar code labels or escape sequences. LED indicates when a bar code has been correctly decoded. Resolution, 0.0075" (.19 mm). Usable from -20 to 65°C, in ambient light to 100,00 lux. EMI compliance per FCC part 15 Class B. ESD immunity, 25 kV.

**Application:** Supports the scanned entry of procedure identification, tag ID, serial number, and operator ID to a Fluke 743 Documenting Process Calibrator.



Fluke 700-IV



Fluke 700BCW



**Included:** Bar code wand with integrated decoding circuitry, holder, and users manual; a Fluke 700BCA Bar Code Adapter, and instruction sheet in English, French, German, Italian, and Spanish.

**Material:** Polycarbonate wand, sapphire tip.

**Dimensions:** 160 mm x 23 mm (diameter). Coiled cable extends to approximately 2.5 m.

**Weight:** 160 g

**Warranty:** One year

**Fluke 700BCA Bar Code Adapter**

**For use with:** Fluke 743 Documenting Process Calibrator.

**Description:** Shielded four conductor cable terminated with a 9-socket D-subminiature connector and a 9-pin D-subminiature connector.

**Application:** Provides interconnection and pin translation between a Fluke 743 Documenting Process Calibrator and a Hewlett Packard HBSW-8200 Bar Code Wand.

**Included:** Interface cable, (calibrator to bar code wand), and instruction sheet in English, French, German, Italian, and Spanish.

**Material:** Black PVC cable and housings, tin plated shells, gold plated copper contacts.

**Dimensions:** Overall length approximately 15 cm

**Warranty:** One year

**Fluke 700TC1 Thermocouple Mini-Plug Kit (11 types)**

**For use with:** Fluke 700 or 740 Series Documenting Process Calibrators, Fluke 714 Thermocouple Thermometer.

**Description:** A kit of 10 mini-plug connectors supporting each of the thermocouple types supported by the Fluke 700 or 740 Series Documenting Process Calibrators.

**Application:** Terminate user-supplied thermocouple wire to permit connection to a process calibrator.

**Included mini plugs**

- Type J (black), one
- Type K (yellow), one
- Type T (blue), one
- Type E (purple), one
- Type R/S (green), one
- Type B or Cu (white), one
- Type L (J-DIN) (blue), one
- Type U (T-DIN) (brown), one
- Type C (red), one
- Type N (orange), one

**Material:** Thermoplastic plug bodies; contacts of appropriate thermocouple metallurgy.

**Warranty:** One year

**Fluke 700TC2 Thermocouple Mini-Plug Kit Type J, K, T, E, R/S**

**For use with:** Fluke 700 or 740 Series Documenting Process Calibrators, Fluke 714 Thermocouple Thermometer.

**Description:** A kit of seven mini-plug connectors supporting six of the most popular thermocouple types.

**Application:** Terminate user-supplied thermocouple wire to permit connection to process calibrator.

**Included mini plugs**

- Type J (black), two
- Type K (yellow), two
- Type T (blue), one
- Type E (purple), one
- Type R/S (green), one

**Material:** Thermoplastic plug bodies; contacts of appropriate thermocouple metallurgy.

**Warranty:** One year



**Fluke BP7217**



**Fluke BP7235**



**Fluke 700TC1**



**Fluke 700TC2**

## Process Calibrator Accessories (continued)

### **BP7217 Ni-Cd Battery Pack**

**For use with:** Fluke 700 or 740 Series Documenting Process Calibrators.

**Description:** 7.2V 1700 mA-hour rechargeable Ni-Cd battery pack.

**Application:** Provides typical 8-hour battery life when used in 700 or 740 Calibrators.

**Included:** One battery pack.

**Material:** Six 1.2V dc Ni-Cd cells in custom-molded ABS/PC-blend case.

**Dimensions:**  
150 mm x 56 mm x 22 mm

**Weight:** 310 g

**Warranty:** One year

### **BE9005 120 Battery Eliminator**

**For use with:** Fluke 700 or 740 Series Documenting Process Calibrators.

**Description:** 7.5V dc battery eliminator for operation of calibrator from 120 volt ac line. UL/CSA recognized.

**Application:** For use in North America; 120V ac 60 Hz lines.

**Dimensions:**  
96 mm x 63 mm x 56 mm;  
1.8 m cord

**Weight:** 500 g

**Warranty:** One year

### **BP7235 NiMH Battery Pack**

**For use with:** Fluke 700 or 740 Series Documenting Process Calibrators, requires BC7217 charger

**Description:** 7.2 V 3500 mA-hour rechargeable NiMH battery pack.

**Application:** Provides typical 16 hour battery life when used in 700 or 740 calibrators.

**Included:** One battery pack

**Material:** Six 1.2 V dc NiMH cells in custom-molded ABS/PC-blend case

**Dimensions:**  
150 mm x 56 mm x 22 mm

**Weight:** 310 g

**Warranty:** One year

### **BE9005 220 Battery Eliminator**

**For use with:** Fluke 700 or 740 Series Documenting Process Calibrators.

**Description:** 7.5V dc battery eliminator for operation of calibrator from 230 volt ac line; VDE and/or TÜV approved.

**Application:** CEE-7 input connector, used primarily in continental Europe; 230V ac 50 Hz lines.

**Dimensions:**  
96 mm x 63 mm x 48 mm;  
1.8 m cord

**Weight:** 500 g

**Warranty:** One year

### **BE9005 240 Battery Eliminator**

**For use with:** Fluke 700 or 740 Series Documenting Process Calibrators.

**Description:** 7.5V dc battery eliminator for operation of calibrator from 230 volt ac line. BABT approved.

**Application:** BS-1363 input plug, used primarily in UK, China, and Hong Kong; 230V ac 50 Hz lines.

**Dimensions:**  
96 mm x 63 mm x 58 mm;  
1.8 m cord

**Weight:** 500 g

**Warranty:** One year

### **BC7217 Battery Charger**

**For use with:** BP7217 NiCd and BP7235 NiMH Battery Packs.

**Description:** Battery charger UL, CSA, MITI, DEMKO, FINKO, SEMKO recognized. CE compliant. EMI per FCC part 15 Class B.

**Application:** Replaces BC7210 Battery Charger. Select 120 volt version for use in North America. Select INTL version for use outside of North America. Line voltage 100 to 250V ac, frequency 50 to 60 Hz. IEC 320 inlet, line cord will be provided based on country of destination.



Fluke BE9005 120



Fluke BE9005 220



Fluke BE9005 240

**Included:** Battery charger base, power supply.

**Dimensions:**

Power supply:  
100 mm x 66 mm x 41 mm;  
1.8 m cord

Charger base:

116 mm x 104 mm x 58 mm

**Weight:** 780 g

**Warranty:** One year

**C700 Hard Carrying Case (700 Series)**

**For use with:** Fluke 700 or 740 Series Documenting Process Calibrators.

**Description:** Hard carrying case with custom-cut foam liner.

**Application:** Cutouts to hold one documenting process calibrator, one Fluke Pressure Module, one BC7210 Battery Charger, one spare BP7217 Battery Pack, and test leads.

**Material:** Exterior: Blow-molded charcoal gray polyethylene with textured surface. Interior: Black, die-cut polyurethane foam.

Handle: Molded polyethylene.

Latches: Zinc-plated steel.

**Dimensions:**

47 cm x 40 cm x 14 cm

**Weight:** 900 g

**Warranty:** One year

**C781 Soft Carrying Case**

**For use with:** Fluke 700 or 740 Series Documenting Process Calibrators. Also fits DSP-100 CableMeter® or DSP-200 CableAnalyzer™ and Fluke 860 Series Graphical Multimeters.

**Description:** Rugged, close-fitting fabric carrying case for documenting process calibrator. A separate, detachable pouch holds test leads and accessories.

**Application:** Designed to be worn on a belt. Remove the calibrator from the C781 for use.

**Material:** Black woven nylon, black vinyl, with yellow Fluke logo panel.

**Dimensions:**

Primary compartment:

26 cm x 14 cm x 5 cm.

Detachable accessory pouch:

19 cm x 14 cm x 3 cm

**Weight:** 230 g

**Warranty:** One year

**C789 Soft Carrying Case**

**For use with:** Fluke 701, 702, and 740 Series Documenting Process Calibrators. Also fits DSP-100 CableMeter® or DSP-200 CableAnalyzer™ and Fluke 860 Series Graphical Multimeters.

**Description:** Rugged, three-compartment fabric carrying case for documenting process calibrator and accessories. Center zippered compartment holds the calibrator, while zippered side compartments are suitable for leads, pressure modules, or spare batteries. A flat pocket on the back surface is ideal for a manual or notebook.

**Application:** Front access flat allows the calibrator to be used while in the C789 Case.

Designed to be carried over one shoulder.

**Included:** Case, detachable handle, and detachable shoulder strap.

**Material:** Black woven nylon, black vinyl, with yellow Fluke logo panels.

**Dimensions:**

30 cm x 25 cm x 8 cm

**Weight:** 700 g

**Warranty:** One year



**BC7217**



**Fluke C789, C700, C781**

## General-Purpose Accessories

	743B/ 744	741B	725/ 726	712	714	715	717	787	87V	51/52	705/ 707	123
Fluke 700Pxx Pressure Modules <sup>1</sup>	•	•	•				•					
BP7217 NiCd Battery Pack	•	•										
BP7235 NiMH Battery Pack	•	•										
BE9005 Battery Eliminator	•	•										
BC7217 Battery Charger	•	•										
Fluke 700BCW Bar Code Wand	•											
Fluke 700BCA Bar Code Adapter	•											
Fluke 700TCI and TC2 Thermocouple Plug Kits	•	•	•		•							
80CJ-M and 80CK-M Mini-Connectors	•	•	•		•					•		
80PK Thermocouple Probes (all)	•	•	•		•					•		
Fluke 700-IV Current Shunt	•	•				•		•	•			•
Fluke 700PMP Pressure Pump	•	•	•				•					
Fluke 700PTP-1 Pneumatic Test Pump	•	•	•				•					
Fluke 700HTP-1 Hydraulic Test Pump	•	•	•				•					
Fluke 700LTP-1 Low Pressure Test Pump	•	•	•				•					
Fluke 787CAL Calibration Kit								•				
80T-IR Infrared Probe	•	•	•			•		•	•			•
80PK-IR Infrared Probe	•	•	•		•					•		
80TK Thermocouple Module	•	•	•			•		•	•	•		•
80T-150U Universal Temperature Probe	•	•	•			•		•	•	•	•	•
TL220/222/224/226/228 Lead Sets	•	•	•			•	•	•	•		•	•
TL70A and Y8140A Lead Sets	•	•	•			•	•	•	•		•	
AC220 and AC280 Clips	•	•	•			•	•	•	•		•	•
TP220 Industrial Test Probes	•	•	•			2	•	3	3		•	
80i-400 AC Current Clamp	•	•				2		3	3			
i410 AC/DC Current Clamp	•	•				•	•	•	•			•
i1010 AC/DC Current Clamp	•	•				•	•	•	•		•	•
C10 Holster and C12A Case											•	
C25/C28/C90/C100/C800 Cases				•	•	•	•	•	•			
C781 Soft Carrying Case	•	•										
C789 Soft Carrying Case	•	•										•
C700 Hard Carrying Case	•	•										
C120 and C125 Case												•
80K-6 and 80K-40 High Voltage Probes	•	•						•	•			•
PV350 Pressure Vacuum Module	•	•				•		•	•		•	•
Fiber Optic Meter (FOM)	•	•				•		•	•		•	•

<sup>1</sup> Ask for Application Note Pub\_ID: 10188

<sup>2</sup> DC current only

<sup>3</sup> 20A ac minimum

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