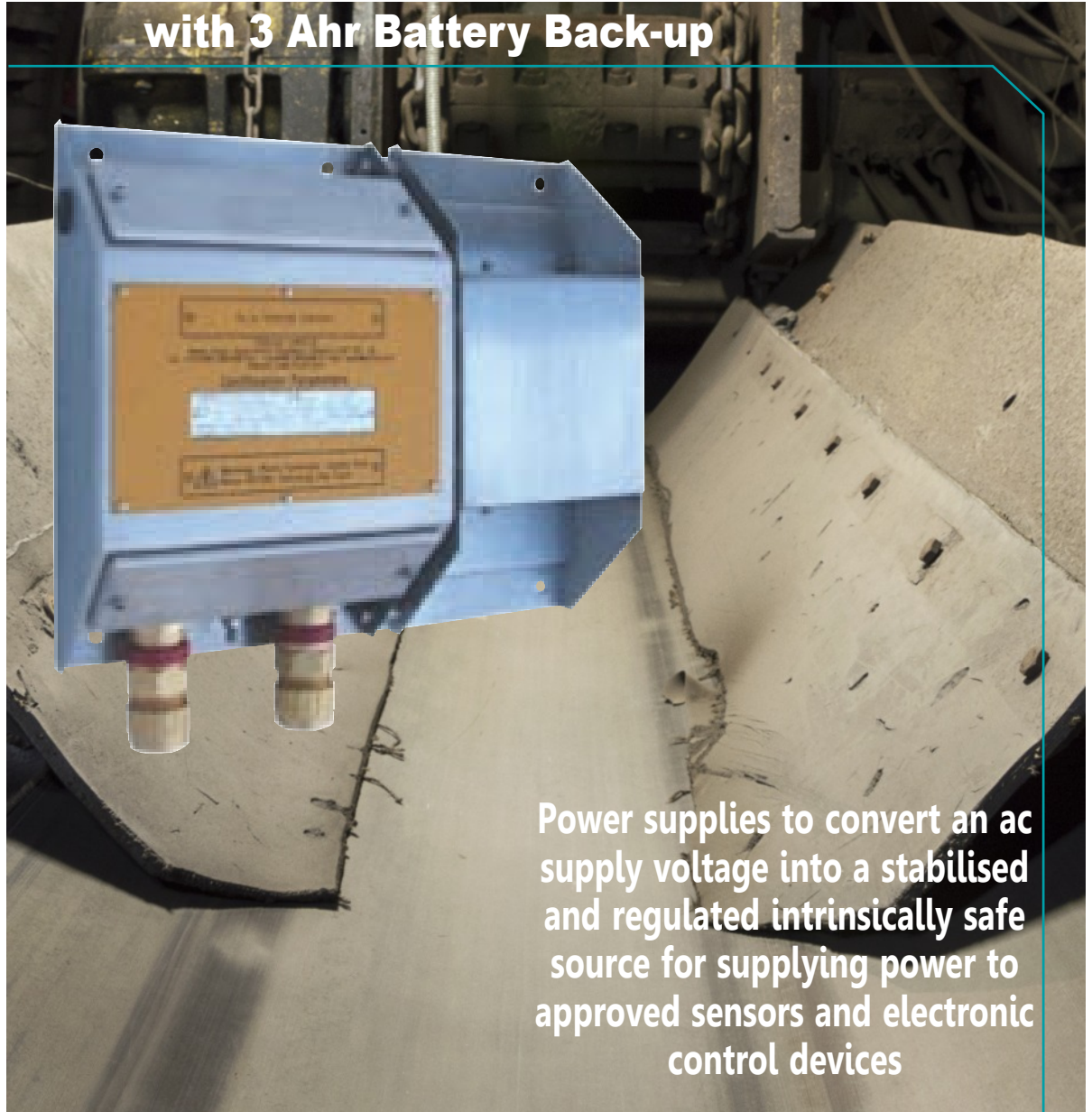




**TX6648**

**INTRINSICALLY SAFE POWER SUPPLY (Exeq)**

**with 3 Ahr Battery Back-up**



Power supplies to convert an ac supply voltage into a stabilised and regulated intrinsically safe source for supplying power to approved sensors and electronic control devices



ATEX  
M2/M1  
GROUP I  
INTRINSICALLY  
SAFE

MINING



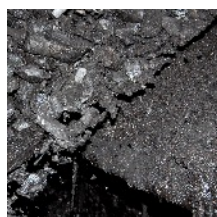
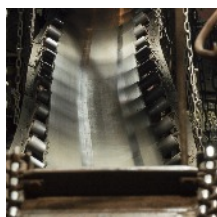
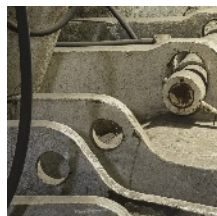
TUNNELLING



STORAGE AREAS &  
WAREHOUSING



WATER  
MANAGEMENT &  
SEWAGE  
TREATMENT



## features...

- Robust stainless steel housing.
- Regulated output is current limited and has continuous short circuit protection.
- 3 Ahr back-up battery with automatic uninterrupted power transfer.
- Battery conserve timer for use on mobile machinery.

## choice

- 12 V dc or 7.5 V dc output voltage.
- Input voltages: 110 V ac or 230 V ac.

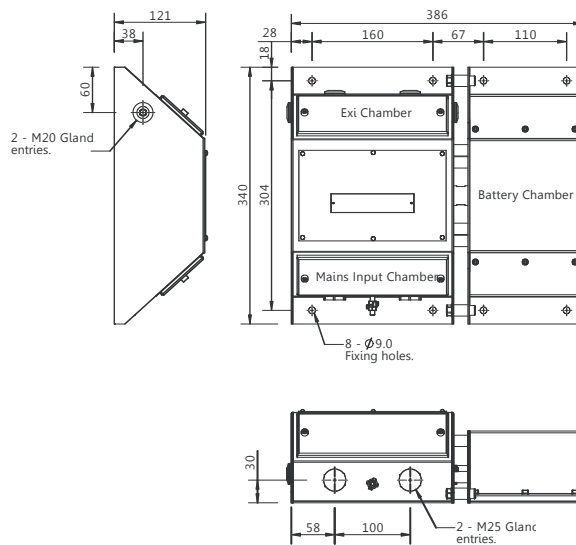


ATEX  
M2/M1  
GROUP I  
INTRINSICALLY  
SAFE

## technical details...

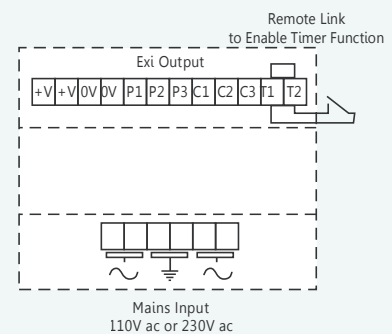
Input Voltage:	110 V ac or 230 V ac. 50/60 Hz.
Output Voltage:	7.5 V dc $\pm$ $\begin{matrix} 0.0V \\ 0.4V \end{matrix}$ or 12 V dc $\pm$ $\begin{matrix} 0.0V \\ 0.6V \end{matrix}$
Output Current:	750 mA.
Output Ripple/Noise:	150 mV max.
Line Regulation:	<5% over the input voltage range.
Load Regulation:	Better than 5% over 10% of load current (-10% at full load).
Voltage Limiting:	Over voltage detection with fuse rupturing 'crowbar' protection and short circuit protection.
Current Limiting:	Automatic current limiting to the intrinsically safe output also limits the current to less than the rupturing capacity of the output protection fuse. 'Reset' the power supply by removing the output load and then reconnecting.
Max. Operating Temperature:	-20°C to +40°C.
Storage Temperature:	-20°C to +70°C.
Humidity:	0 to 95% RH, non-condensing.
Vibration Limits/Low Frequency:	0.25 mm pk, sinusoidal vibration in the range 10 Hz to 100 Hz in 3 perpendicular planes.
Medium Frequency:	2 g pk, sinusoidal vibration in the range 10 Hz to 600 Hz in 3 perpendicular planes.
Mechanical Shock:	1000 shocks of 40 g minimum in 3 perpendicular planes.
Housing Material:	Stainless Steel.
Back-up Battery:	<ul style="list-style-type: none"> <li>• Sealed lead/acid. 3 Ahr.</li> <li>• Automatic unrestricted charge control to full capacity.</li> <li>• Automatic uninterrupted power transfer on power failure.</li> </ul>
Power Fail Indication:	Output contact opens on Power Failure. Contact rating: 0.5 Ahr 30 V dc max.
Charge Condition:	4 to 20mA output signal proportional to the charge level of the battery.

## dimensions...



ALL DIMENSIONS IN MM

## Connections



P1 = C	} Power Fail Relay
P2 = N/C	
P3 = N/O	
C1 = 0.4 to 2 V	} Charge Condition Monitor Output
C2 = 0 V	
C3 = 4 to 20 mA	
T1	} Timer Control Terminals
T2	



## battery conserve timer...

The TX6648 Power Supply is fitted with a Battery Conserve Timer. The timer is used to conserve battery power when used on mobile machinery where battery support will only be required for short intervals between long periods.

- The battery will be charged in the normal way when the main power is ON.
- The battery back-up will be terminated 30 minutes after the main power is OFF.
- The battery back-up may be re-instated at any time for a period of 30 minutes by operation of a pushbutton on the side of the power supply housing, or a remote pushbutton connected to T1 and T2.
- The timer is disabled by fitting a link between T1 and T2.

## certification & approval...



TX6648

INTRINSICALLY SAFE POWER SUPPLY (Exeq):

Sira 02ATEX3418

I M1 EEx eq(ia)/EEx ia



Designed to comply with the requirements of the EMC directive: • EMC directive 89/336/EEC  
• ATEX directive 94/9/EEC



ATEX  
M2/M1  
GROUP I  
INTRINSICALLY  
SAFE

## order reference...



TX6648

INTRINSICALLY SAFE POWER SUPPLY (Exeq)

with 3 Ahr BATTERY BACK-UP

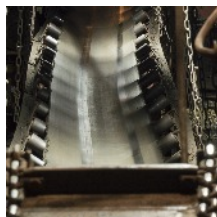
Please specify

INPUT VOLTAGE OPTIONS:

- |            |       |
|------------|-------|
| • 110 V ac | (105) |
| • 230 V ac | (106) |

OUTPUT VOLTAGE OPTIONS:

- |                 |       |
|-----------------|-------|
| • 7.5 V dc Ex i | (109) |
| • 12 V dc Ex i  | (101) |



### TROLEX LIMITED

NEWBY ROAD, HAZEL GROVE, STOCKPORT,  
CHESHIRE SK7 5DY, UK

+44 (0)161 483 1435

sales@trolex.com

www.trolex.com