

# TYPE-EXAMINATION CERTIFICATE

1. Type-examination Certificate (Module A)
2. Equipment or Protective System intended for use in potentially explosive atmospheres (Directive 2014/34/EU)



3. Type examination certificate Nr                      ITS12ATEX47709X Rev. 0

4. Product:                      Conquest 3678 Motor Drive Unit

5. Manufacturer:              Akron Brass    Applicant:              Akron Brass

6. Address:                      343 Venture Blvd, Wooster, Ohio,                      Address:              343 Venture Blvd, Wooster, Ohio, 44691, USA.                      44691, USA.

7. This product and any acceptable variation thereto are specified in the schedule to this certificate and therein referred to.
8. INTERTEK ITALIA S.p.A., certifies that the equipment or protective system has been found to comply with the essential Health and Safety Requirements relating to the design and construction of equipment and protective system intended for use in potentially explosive atmosphere, given in Annex II of the Directive.

The examination and tests results are recorded in confidential technical evaluation Intertek Report Nr. 104752473CHE-001, dated 26 August 2021

9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN IEC 60079-0:2018, EN 60079-15:2010, EN 60079-28:2015 except in respect of those requirements referred to at item 16 of the Schedule
10. If the sign X is placed after the certificate number, it indicates that the product is subject to Special Conditions for Safe Use specified in the schedule to this certificate.
11. This Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
12. The marking of the product shall include the following:



II 3 G Ex nA nC IIC T6 Gc -40°C ≤ Ta ≤ 60°C

or

II 3 G Ex nA nC IIC T4 Gc -20°C ≤ Ta ≤ 50°C (Fitted with power supply, Ethernet module, and relay module)

or

II 3 (2) G Ex nA nC [op pr Gb] IIC T4 Gc -20°C ≤ Ta ≤ 50°C (Fitted with an additional optic fibre module)

Certificate issue date

3<sup>rd</sup> September 2021

**Paul Moss**

Certification Officer  
Intertek Italia S.p.A.

This certificate has been issued by Intertek Italia S.p.A. on transfer from Intertek Testing & Certification Ltd. using the same issued original certificate number.



This Certificate is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Certificate. Only the Client is authorized to permit copying or distribution of this Certificate and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.

Intertek Italia S.p.A. Via Miglioli, 2/A - 20063 Cernusco sul Naviglio, Milano - Italy



## SCHEDULE

TYPE EXAMINATION CERTIFICATE NUMBER: ITS12ATEX47709X Rev. 0

### 13. DESCRIPTION OF THE EQUIPMENT OR PROTECTIVE SYSTEM

The Conquest 3678 Motor Drive Unit contains a custom engineered, three axis motor drive module, control transformer, auxiliary relays and terminal strips. Housed in a general purpose, stainless steel, IP66 enclosure; of approximate dimensions 20 x 25 x 10 inches (510 x 650 x 250mm), it is rated for connection to 110V or 240V ac supply, and provides control and electrical drive to the AC Conquest Monitor System the Conquest Motor Drive Unit controls and protects the rotation, elevation and nozzle pattern functions of the Conquest Remote Controlled Monitor.

### 14. DRAWINGS AND DOCUMENTS

TITLE	DOCUMENT Nr	LEVEL	DATE
ID TAG (FM/ATEX) AC CONQUEST DRIVE BOX 3678 (Sheet 1 of 1)	B48391	01	10-16
CONQUEST MONITORING SYSTEMSDIAGRAM GENERAL LAYOUT AND BILL OF MATERIAL, CONNECTIONS (Sheets 1 to 6)	D90954	1	09/20
MOTOR CONTROL UNIT ASSEMBLY & WIRING (Sheets 1 and 2)	90761	0	5/31/13
*120VAC CONQUEST PCB ONLY ASSEMBLED, COATED, TESTED 3678	1008-401	03	6/15
ASSEMBLY – BOX 3 Axis Motor Drive Unit 120V AC Conquest 3678 (Sheet 1 of 7)	47078	02	8-13
ASSEMBLY – WIRING DIAGRAM 3 Axis Motor Drive Unit 120V AC Conquest 3678 (Sheet 2 and 3 of 7)	47078	02	8-13
ASSEMBLY – ENLOSURE MACHINING 3 Axis Motor Drive Unit 120V AC Conquest (Sheet 4 of 7)	47078	02	8-13
ASSEMBLY – FACEPLATE 3 Axis Motor Drive Unit 120V AC Conquest (Sheet 5 of 7)	47078	02	8-13
ASSEMBLY – FACEPLATE SILKSCREEN 3 Axis Motor Drive Unit 120V AC Conquest (Sheet 6 of 7)	47078	02	8-13
ASSEMBLY – BILL OF MATERIALS 3 Axis Motor Drive Unit 120V AC Conquest (Sheet 7 of 7)	47078	02	8-13
*Urethan Sponge 1/4" x 1" x 80'	M1423	B	6/4/12

Copies of the above listed documents are kept at Intertek Italia S.p.A. archive.



## SCHEDULE

**TYPE EXAMINATION CERTIFICATE NUMBER: ITS12ATEX47709X Rev. 0**

### 15. SPECIAL CONDITIONS FOR SAFE USE

- There can be up to eight penetrations into the enclosure for the mains supply, interface cabling to the associated Conquest 3678 monitor motors, and interface to any operator control panels may be made in line with instructions and dimensions specified for the chosen cable glands.
- Suitably ATEX certified IP54 rated cable glands must be used that have a minimum ambient temperature range of Tamb: -40°C to +60°C.
- Any unused cable entries shall be fitted with ATEX certified IP54 rated blanking plugs which have a minimum ambient temperature range of Tamb: -40°C to +60°C.
- A fibre optic transmitter may be fitted, the output from which must always be routed out of the enclosure via armoured cable or conduit and must be terminated within a suitably certified enclosure or in a safe area.

### 16. ESSENTIAL HEALTH AND SAFETY REQUIREMENTS

The relevant essential Health and Safety Requirements have been identified and assessed in Intertek Report Nr. 104752473CHE-001 dated 26 August 2021

### 17. ROUTINE (FACTORY) TESTS

- The internal Allen Bradley screw terminals have a torque value specified of 0.5 to 0.6 Nm. for tightening of the screws onto conductors.
- Cable entry holes must be a minimum of 50mm from the enclosure walls. A minimum of 50mm unobstructed distance must be allowed between adjacent cable entries, or greater if required by the instructions for the specific cable glands used.
- Certification details, instruction (including any required special condition for use) shall be conveyed to the user in an appropriate manner.