Supplemental Instructions
For the Installation, Operation of
ATEX Approved:
DODGE SC, Eccentric, & D-lok series mounted Ball Bearings
DODGE GT, GRIPTIGHT Adapter mounted Ball Bearings
DODGE TYPE E mounted Tapered Roller Bearings
DODGE Double Interlock mounted Tapered Roller Bearings
DODGE TAF mounted Tapered Roller Bearings
DODGE S-2000 mounted Spherical Roller Bearings
DODGE IP, ISAF Imperial Mounted Spherical Roller Bearing

PREFACE

The products described in this manual are manufactured by Baldor Electric Company, Ft. Smith, AR USA. Dodge is a registered trademark of Baldor Electric Company. This manual, combined with Installation Instruction Manuals listed below, is intended to provide basic information on the safe operation and maintenance of ATEX approved DODGE mounted ball and roller bearings:

- SC, Eccentric, & D-lok Mounted ball bearing Instruction Manual
- GT Grip Tight Mounted ball bearing Instruction Manual
- Type E Bearings Instruction Manual
  - 1-3/16” - 3” bore size
  - 3-3/16” - 5” bore size
  - 5-7/16” - 7” bore size
- Double Interlock Instruction Manual
  - 1-3/16” - 3” bore size
  - 3-3/16” - 5” bore size
- TAF Instruction Manual
- S-2000 Mounted Spherical Roller Bearing Instruction Manual
- Imperial Adapter Mounted Spherical Roller Bearing Instruction Manual
- ISN Imperial Instruction Manual (IP metric)

WARNING: Because of the possible danger to persons(s) or property from accidents which may result from the improper use of products, it is important that correct procedures be followed. Products must be used in accordance with the engineering information specified in the catalog. Proper installation, maintenance and operation procedures must be observed. The instructions in the instruction manuals must be followed. Inspections should be made as necessary to assure safe operation under prevailing conditions. Proper guards and other suitable safety devices or procedures as may be desirable or as may be specified in safety codes should be provided, and are neither provided by Baldor Electric nor are the responsibility of Baldor Electric. This unit and its associated equipment must be installed, adjusted and maintained by qualified personnel who are familiar with the construction and operation of all equipment in the system and the potential hazards involved. When risk to persons or property may be involved, a holding device must be an integral part of the driven equipment beyond the speed reducer output shaft.

These instructions do not cover all details or variations in equipment nor provide every possible contingency or hazard to be met in connection with installation, operation, and maintenance. Should further information be desired or should particular problems arise which are not covered in this manual, the matter should be referred to your local Baldor•Dodge or Baldor Electric representative.

DODGE Mounted Ball, Spherical, and Roller bearings are manufactured under the guidelines of the ATEX directive 94/9/EC.

DODGE Mounted Bearings are suitable for ATEX Category 2 and M2, Group II and I, for gas and dust environments and are also suitable for ATEX Category 3 for all gas or dust environments with ignition temperatures higher than T3 = 141°C.

A sticker indicating ATEX certification will be attached to the product or on the box containing the product and will be similar to the following:

Tamb -30°C to +50°C
I M2c
II 2 GD c 141˚C (T3)
Sira 04 ATEX 9359
DODGE BEARINGS
MFG. BY BALDOR ELECTRIC COMPANY FT. SMITH, AR USA

HAZARDOUS AREA USE

For hazardous area use, the following potential ignition hazards have been identified:

- Heat generation
- Circulating current

These potential hazards have been addressed by the design; and rely on correct installation and maintenance as detailed in the equipment instructions.

BALDOR • DODGE®

WARNING: Excessive temperatures are a result of an abnormal operating condition(s) caused by:

a) **Improper installation - refer to installation manual for proper procedures**
b) **Excessive misalignment - re-align bearings and shaft**
c) **Excessive loading - re-evaluate application and selection**
d) **Excessive speed - re-evaluate application and selection**
e) **Lubrication - either excessive or inadequate amounts.**
f) **Bearing failure**

If applied in a Division 1 or Zone 1 environment this excessive temperature may cause ignition of hazardous materials. In that case, it is recommended that temperature monitoring devices be implemented. These sensors can operate an alarm when excessive temperatures are approached.

REPLACEMENT:

Per the ATEX directive, bearings shall be replaced after a period not exceeding 90% of the calculated LIO life for category 2 equipment. For category I equipment, the bearings shall be replaced after period not more than 50% of the calculated LI0 life. The LI0 life should be calculated using formula and load ratings published in the DODGE bearing engineering catalog. A Baldor Electric representative can provide assistance.

ADDITIONAL INSTRUCTIONS FOR SAFE INSTALLATION AND USE

- All rotating parts should be guarded to prevent contact with foreign objects which could result in sparks, ignition, and/or damage to the bearing.
- Bearings should be periodically inspected for normal wear, dust/dirt buildup or any other related scenario that would impede heat dissipation.
- Increasing levels of vibration and noise could indicate the need for inspection, repair or replacement of the bearing.
- Electrical sparks are a source of ignition. To reduce this risk, proper electrical bonding and grounding is required.
- Operating the bearing to failure may result in breakage or damage to the equipment, and could become an explosion hazard. Damaged bearing components or units must not be operated in a hazardous environment. Replace bearings per ATEX directive as stated in the “replacement” section of this manual.
- Bearings shall be protected from vibrations from external sources. The seals are made from Nitrile Rubber composition and the user shall determine the suitability of this seal with the intended environment. Further assistance can be made from a Baldor-Dodge or Baldor Electric representative.
- Automatic lubricating systems can be installed to ensure proper lubrication of the bearing at all times to minimize the risk of bearing failure and creating a potential explosion hazard.

EC Declaration of Conformity

The undersigned, representing the following supplier -

Baldor Electric Company
5711 R. S. Boreham, Jr. Street
Fort Smith, Arkansas 72901
USA
herewith declare that the Products

Bearings

Product identification (brand and catalogue number/part number):

Dodge Mounted Ball Bearings SC, SX, D-Lok, GT Grip Tight, Dodge Mounted Taper Roller Bearings, Type E, Double Interlock, TAF, Dodge Mounted Spherical Roller Bearings - S2000, Imperial, Equipment Group I, Category M2 c/Equipment Group II Category 2 GD c 141°C (T3) Tamb - 30°C to +50°C

are in conformity with the provisions of the following EC Directive(s) when installed in accordance with the installation instructions contained in the product documentation:

94/9/EC	*ATEX*

and that the standards and/or technical specifications referenced below have been applied:

EN 13463-1:2009	*Non - Electrical Equipment For Potentially Explosive Atmospheres -Method And Requirements*
EN13463-5:2011	*Non-Electrical Equipment Intended For Use In Potentially Explosive Atmospheres - Part 5: Protection by constructional Safety 'c'*

Notified Body:
Sira Certification Service -
Rake Lane, Eccleston
Chester, CH4 0JN
England
Certificate: SIRA 04ATEX9359

Supplier: *:*
Signature

Evans Massey

Name: L. Evans Massey
Position: Manager Standards and Certification
Date: **12 March 2014**

BALDOR®

A MEMBER OF THE ABB GROUP

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