

Supplemental Instructions For the Installation, Operation And Maintenance of

ATEX Approved Quantis ILH, RHB, & MSM Reducers (Zone 1) Sizes 38 – 168

PREFACE

The products described in this manual are manufactured by Baldor Electric Company, Fort Smith, Arkansas 72901.

This supplemental manual (combined with manuals MN1616, MN1617, and MN1618) is intended to provide basic information on the safe operation and maintenance of the ATEX approved Quantis reducers. 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 the manual, the matter should be referred to your local Baldor Electric Company representative.

The reducer was manufactured under guidelines of the ATEX directive 94/9/EC.

The Quantis ILH, RHB, & MSM size 38 & 48 reducers are suitable for ATEX Category 2, Group II and I, for gas and dust environments and are suitable for ATEX Category 3 for all gas and dust environments within ignition temperatures higher than T4 (135° C). The Quantis ILH, RHB, & MSM size 68 – 168 reducers are suitable for ATEX Category 2 and M2 (mining), Group II and I, for gas and dust environments and are suitable for ATEX Category 3 for all gas and dust environments within ignition temperatures higher than T4 (135° C).

Quantis reducers with C-face clamp collar and three piece coupled input configurations have a -30 to +50 deg. C ambient temperature certification. Quantis reducers with separate input configurations have a -30 to +45 deg. C ambient temperature certification.

WARNING: Because of the possible danger to person(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 Company nor are the responsibility of Baldor Electric Company. 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.

Certification markings are contained on the reducer nameplates. Typical nameplates are shown below.

C-FACE CLAMP COLLAR & THREE PIECE COUPLED INPUT CONFIGURATIONS

REORDER NO.: Catalog No: Serial No: BT131500107		REORDER NO.: Catalog No: Serial No: BT131500107	
Ratio 161.05:1	Input Speed 1750 RPM	Ratio 161.05:1	Input Speed 1750 RPM
Output Torque 3983 in-lb Max.	Input Power 0.69 HP Max.	Output Torque 3983 in-lb Max.	Input Power 0.69 HP Max.
Service Factor 1.00	O/P Shaft 1.250 x 2.36 IN	Service Factor 1.00	O/P Shaft 1.250 x 2.36 IN
Position A1	Lube Type: STD	Position A1	Lube Type: STD
OPS. Manual MN1616		OPS. Manual MN1616	
II 2GD c k T4 CE SIRA 12ATEX6165 Tamb -30° C to +50° C		II 2GD c k T4 CE SIRA 12ATEX6165 Tamb -30° C to +50° C	
MFG. BY BALDOR ELECTRIC CO / FT SMITH, AR 72901 USA		MFG. BY BALDOR ELECTRIC CO / FT SMITH, AR 72901 USA	

Sizes 38 & 48

Sizes 68 - 168

SEPARATE INPUT CONFIGURATIONS

REORDER NO.: Catalog No: Serial No: BT131500107		REORDER NO.: Catalog No: Serial No: BT131500107	
Ratio 161.05:1	Input Speed 1750 RPM	Ratio 161.05:1	Input Speed 1750 RPM
Output Torque 3983 in-lb Max.	Input Power 0.69 HP Max.	Output Torque 3983 in-lb Max.	Input Power 0.69 HP Max.
Service Factor 1.00	O/P Shaft 1.250 x 2.36 IN	Service Factor 1.00	O/P Shaft 1.250 x 2.36 IN
Position A1	Lube Type: STD	Position A1	Lube Type: STD
OPS. Manual MN1616		OPS. Manual MN1616	
II 2GD c k T4 CE SIRA 12ATEX6165 Tamb -30° C to +45° C		I M2 c k II 2GD c k T4 CE SIRA 12ATEX6165 Tamb -30° C to +45° C	
MFG. BY BALDOR ELECTRIC CO / FT SMITH, AR 72901 USA		MFG. BY BALDOR ELECTRIC CO / FT SMITH, AR 72901 USA	

Sizes 38 & 48

Sizes 68 - 168

ATTENTION

Failure to operate the reducer properly can cause the reducer to exceed maximum certified temperatures. If applied in a Division 1 or Zone 1 environment, this excessive temperature may cause ignition of hazardous materials.

ABNORMAL CONDITIONS

Operating the reducer under any of the following conditions can cause higher than normal operating temperatures:

1. Reducer load exceeding nameplate ratings
2. Ambient temperature above nameplate rating.
3. Inadequate cooling.
4. Insufficient amount or improper lubricant type.
5. Operation above nameplate input speed.

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ADDITIONAL INSTRUCTIONS FOR SAFE INSTALLATION AND USE

WARNING: The ABS plastic output shaft safety covers maybe an electrostatic charging hazard. The following measures should be taken into account:

- **Ensure that the ABS plastic safety cover does not come into contact with moving parts.**
- **Clean safety covers with a damp cloth only.**

WARNING: Do not remove inspection cover or open the reducer when a flammable / explosive atmosphere is present.

- All rotating parts should be guarded to prevent contact with foreign objects which could result in sparks and ignition.
- Inspect reducer for proper oil level and signs of oil leakage every 2000 hours or every 6 months whichever comes first. If seals are leaking, replace seals and fill with recommended lubricant to mounting position oil level.
- Inspect reducer bearings for excessive noise, vibration, or end play every 2000 hours or 6 months whichever comes first. Increasing noise, vibration, or end play levels could indicate the need for repair or reducer replacement.
- Periodically inspect reducer for dust / dirt build up on exterior surfaces. Excessive dust / dirt build up could impede heat dissipation. If dust / dirt build up is greater than 5mm (.200") thick, clean build up from all exterior surfaces. SEE WARNING ABOVE.
- Electrical sparks are a source of ignition. To reduce this risk, proper electrical bonding and grounding are recommended.
- Follow lubrication instructions and service schedule in manuals MN1616 (ILH), MN1617 (MSM), and MN1618 (RHB).
- Always use Baldor / Dodge replacement parts when servicing or repairing the Quantis reducers. Refer to Baldor / Dodge Renewal Parts department @ 864-297-4160 for parts and parts list drawings.

For instructions on receiving and handling, installation, operation, maintenance, and service refer to manuals MN1616 (ILH), MN1617 (MSM), and MN1618 (RHB).

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

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

Quantis Range of Reduction Gearboxes



Sizes 68, 88, 108, 128, 148 and 168

I M2 c k

II 2GD c k T4

Tamb -30°C to +50°C (c-face clamp collar and c-face 3 piece coupling inputs)

Tamb -30°C to +45°C (separate input)

Sizes 38 and 48

II 2GD c k T4

Tamb -30°C to +50°C (c-face clamp collar and c-face 3 piece coupling inputs)

Tamb -30°C to +45°C (separate input)

Sira 12ATEX6165

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'

EN13463-8:2003

Non-Electrical Equipment Intended For Use In Potentially Explosive Atmospheres - Part 8: Protection by liquid immersion 'k'

Supplier:

Signature

Name:

L. Evans Massey

Position:

Manager Standards and Certification :

Date:

12 November-2013

BALDOR

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Dodge Product Support

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