AEP3-GV control unit

SKF ChainLube





The AEP3-GV is a programmable control unit designed to be used with SKF grease injection systems for the lubrication of industrial sterilizer chains.



Chain lubrication

The SKF GVP grease injection system is used to lubricate conveyor chains. Lubricant is injected at the lubrication point – chain pin – without stopping the chain motion or interrupting production.

The GVP lubrication system is mounted along the chain, as close as possible to the lubrication points. Depending on whether the conveyor it has one or two chains, one or two GVP systems can be installed.

One or more proximity switches are fitted on the chain to detect the moving lubrication point and to signal the AEP3-GV.

AEP3-GV control unit

The main function of the AEP3-GV control unit is to trigger a lubrication cycle of the GVP system at the right time.

The control unit processes the signals sent by the proximity switch(es) and will trigger lubricant delivery, based on the parameters set by the operator.

The lubrication process can be adapted to the specific configuration of the conveyor utilizing the lubrication program. Several parameters must be set, such as the number of chain lubrication points, the lubrication frequency and the interval between two lubrication cycles.

Main functional characteristics of the AEP3-GV

- Management of several independent lubrication cycles (up to four cycles)
- Two lubrication modes, automatic and manual
- Adjustment of lubrication frequency (pitch) to meet the chain speed
- Monitoring of the main functions of the lubrication system
- Failures are signaled, described and recorded in a historical file

GVP lubrication system operation monitoring

The AEP3-GV control unit analyzes the different signals sent by the sensors fitted on the GVP system to monitor the proper operation of the following:

- moving mechanical parts of the system
- control air pressure
- lubricant pressure

For all systems described in this brochure, see important product usage information on the back cover.



Interface

The lubrication program can be accessed easily on the 5.7-inch, color touch-screen mounted on the unit's cabinet door.

The operator simply presses the screen to browse different menus and to set system parameters. A numeric keyboard appears on the screen for entering certain information.

Lubrication parameter settings are secured with a password to prevent accidental modification.

Design

The AEP3-GV control unit is designed as a cabinet with an interactive screen on the front side.

The stainless steel cabinet – protection rating IP 65 – houses all electric and electronic components of the control unit. The AEP3-GV is locked to prevent any accidental alteration of the lubrication program and is turned on by a switch on the side of the cabinet.

The control unit has 14 digital inputs and two analog inputs, as well as 10 digital outputs. All electric connections are made with cable fittings underneath the cabinet.



AEP3-GV touch-screen

Technical data

AEP3-GV control unit

Cabinet Material Sizes Weight Protection

Power supply

Voltage and intensity Current max. Output voltage Output current max. Fusing

Control unit

Operating voltage Screen Operating temperature Storage temperature Digital inputs Analog inputs Digital outputs

Shock and vibration immunity Protection

Delivered connection cable

stainless steel 406 × 406 × 200 mm approx. 22 kg IP 65

100 – 240 V AC, 50/60 Hz 2 A 24 V DC 3,2 A 2 A, timed

24 V DC TFT touch screen 5.7" 0 to 50 °C -20 to +60 °C 14 2 10

CEI 61131-2 CEI 60529

2 × 15 m, multicore cable



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Combining products, people, and applicationspecific knowledge, SKF delivers innovative solutions to equipment manufacturers and production facilities in every major industry worldwide. Having expertise in multiple competence areas supports SKF Life Cycle Management, a proven approach to improving equipment reliability, optimizing operational and energy efficiency and reducing total cost of ownership. These competence areas include bearings and units, seals, lubrication systems, mechatronics, and a wide range of services, from 3-D computer modelling to cloud-based condition monitoring and asset management services.

SKF's global footprint provides SKF customers with uniform quality standards and worldwide product availability. Our local presence provides direct access to the experience, knowledge and ingenuity of SKF people.



Important information on product usage

This brochure was presented to you by:

All products from SKF may be used only for their intended purpose as described in this brochure and the operating instructions. If operating instructions are supplied together with the products, they must be read and followed.

Not all lubricants can be fed using centralized lubrication systems. SKF can, on request, inspect the feedability of the lubricant selected by the user in centralized lubrication systems. Lubrication systems and their components manufactured by SKF are not approved for use in conjunction with gases, liquefied gases, pressurized gases in solution, vapors or such fluids whose vapor pressure exceeds normal atmospheric pressure (1 013 mbar) by more than 0,5 bar at their maximum permissible temperature.

In particular, we call your attention to the fact that hazardous materials of any kind, especially the materials classified as hazardous by EC Directive 67/548/EEC, Article 2, Para. 2, may only be filled into SKF centralized lubrication systems and components and delivered and/or distributed with the same after consultation with and written approval from SKF.

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PUB LS/P2 14084/1 EN · September 2013

