1-4303-EN

AEC-UC

Control unit for oil lubrication systems type UC dedicated to the conveyor chain lubrication



- For lubrication system using nozzles or oiling brushes
- For one or two independent lubrication cycles
- Time- or pulse-dependent control of the lubrication and pause phases
- Parameter setting of the control unit directly on a computer
- Communication between several control units via different fieldbuses



Lubrication parameters

The lubrication cycle

The lubrication cycle consists of the lubrication phase followed by the pause phase.

The lubrication phase

The lubrication phase corresponds to the effective lubrication of the chain. The control unit triggers the lubrication phase, which is time- or pulse-dependent. The user sets this parameter.

The lubrication pitch

The lubrication pitch corresponds to the lubrication frequency. It is possible to lubricate the lubrication points one after the other or to lubricate one point every 'X' number of points..

Pause phase

The pause phase is the time between two lubrication phases. The pause phase can be set in two different operating modes (time- or pulse dependent).

Time-dependent operating mode

With this mode the length of the phase (lubrication or pause) is determined by the control unit, which triggers a new phase at intervals specified by the user.

Pulse-dependent operating mode

In this mode, the length of the phase (lubrication or pause) is determined by the machine, which sends pulses to the control unit. The control unit counts the pulses it receives, and a new phase is triggered after a preset number of pulses, specified by the user.

Lubricant level monitoring

The control unit can also monitor the lubricant minimal level in the reservoir of the lubrication system with the help of a level switch. As soon as the lubricant drops below the minimal level, the current lubrication cycle is stopped and a fault signal is emitted.

AEC-UC versions

AEC-UC-1: Designed for lubrication system with nozzles. Two independent lubrication cycles. Cycle 1: pulse-dependent lubrication and time- or pulse-dependent pause; cycle 2: pulse-dependent lubrication and time- or pulse-dependent pause. Min. level monitoring.

AEC-UC-2: Designed for lubrication system with nozzles. Two independent lubrication cycles. Cycle 1: pulse-dependent lubrication and time- or pulse-dependent pause; cycle 2: time- or pulse-dependent lubrication and pause. Min. level monitoring.

AEC-UC-3: Designed for lubrication system with nozzles. Two independent lubrication cycles. Cycle 1: pulse-dependent lubrication and pause; cycle 2: pulse-dependent lubrication and pause. Min. level monitoring.

AEC-UC-4: Designed for lubrication system with oiling brushes. Two independent lubrication cycles. Cycle 1: time-dependent lubrication and pause; cycle 2: time-dependent lubrication and pause. Min. level monitoring.

Programming software for AEC unit

The user sets the different parameters of the control unit AEC directly on computer. With the software AEC-SOFT the user can follow in real time the evolution of the different lubrication cycles. The user also receives information on events occurring during the lubrication cycle.

The software and the connection cable (A/B USB cable) are delivered with the control unit.

-avourites Commands Configuration ? SKF_2 SKF_1			
VOGEL administrator connected			
Display Configuration			
Identity Name V VOGEL_IO 1	/ersion 1.2	Parameters Reference AEC-UC-04	
Circuit No. 1 (O.2) Lubrication in F Time C Laps U Lubrication time 000h01min=	Circuit No. 2 (0.3) Lubrication in Time C Laps Lubrication time 000h01min $\stackrel{+}{=}$	On/Off switch Circuit No. 1 (0.2) Circuit No. 2 (0.3) C NO C NO	ψ
Pause in ↓ P Time ← Laps ↓ Pause time ↓ 000h0.tmm -1 ↓ Pump ON time ↓ 0005 10° ↓ Pump off time ↓ 0005 40° ↓	Pause in c Time ⊂ Laps Pause time 00000 Limin → ↓ Pump ON time 0000 10' → ↓ Pump Off time 0000 40' → ↓	Paulue ouplut contact (0.1) r NO r NC Sensor monitoring time 01min → ↓ 4000 ↓ Restart in r Lubrication	ф Ф

See important product usage information on the back cover.



Technical data

Power supply				
Inputs				
Outputs 3 Relay output 1 Current [I] 4 A max. Voltage [U] 250 V AC max. Static outputs 2 115 V AC. I max. 2 A, U max. 250 V AC 230 V AC. I max. 2 A, U max. 30 V AC 24 V DC I max. 4 A, U max. 30 V AC				
Protection IP65 Service temperature 0 to 40 °C Housing material ABS Color				
Connectors (delivered with the control unit) Power supply connector square 24, female Input connector screw M12×1, round, female Output connector screw M12×1, round, male				

Connectors (not delivered with the control unit) Communication connector \ldots . screw M12×1, round, female

Control unit AEC-UC					
	Communication mode				
Order No.* **	Modbus	Profibus	CANopen		
AEC-UC-1-001	•				
AEC-UC-1-002		•			
AEC-UC-1-003			•		
AEC-UC-2-001	•				
AEC-UC-2-002		•			
AEC-UC-2-003			•		
AEC-UC-3-001	•				
AEC-UC-3-002		•			
AEC-UC-3-003			•		
AEC-UC-4-001	•				
AEC-UC-4-002		•			
AEC-UC-4-003			•		

 *) Please refer to the table "AEC-UC versions" to know the different versions
**) Please indicate the voltage key when ordering: +428 for 230 V AC, 50/60 Hz, +429 for 115 V AC, 50/60 Hz, +924 for 24 V DC

Communication connector Order No. AC.4142.2

Order information

Order No.: 1-4303-EN

Subject to change without notice! (04/2009)

Important product usage information

All products from SKF may be used only for their intended purpose as described in this brochure and in any instructions. If operating instructions are supplied with the products, they must be read and followed. Not all lubricants are suitable for use in centralized lubrication systems. SKF does offer an inspection service to test customer supplied lubricant to determine if it can be used in a centralized system. SKF lubrication systems or their components are not approved for use with gases, liquefied gases, pressurized gases in solution and fluids with a vapor pressure exceeding normal atmospheric pressure (1013 mbars) by more than 0,5 bar at their maximum permissible temperature.

Hazardous materials of any kind, especially the materials classified as hazardous by European Community Directive EC 67/548/EEC, Article 2, Par. 2, may only be used to fill SKF centralized lubrication systems and components and delivered and/or distributed with the same after consulting with and receiving written approval from SKF.

Further brochures 1-9201-EN Transport of Lubricants in Centralized Lubrication Systems

SKF Lubrication Systems France SAS

Rue Robert Amy, B.P. 70130 49404 Saumur cedex - France Tel. +33 (0)2 241 404 200 · Fax +33 (0)2 241 404 242 www.skf.com/lubrication This brochure was presented by:

$\circledast\,$ SKF is a registered trademark of the SKF Group.

© SKF Group 2009

The contents of this publication are the copyright of the publisher and may not be reproduced (even extracts) unless prior written permission is granted. Every care has been taken to ensure the accuracy of the information contained in this publication but no liability can be accepted for any loss or damage whether direct, indirect or consequential arising out of the use of the information contained herein.

