

Salient Characteristics

Item 1 – Auma SA14.2/GS200.3 Gearbox/AM02.1 Controls (QTY 1):

Salient Characteristics:

Item: 1 - SA14.2/GS200.3/AM02.1

QUOTATION

AUMA product	Quarter-turn electric actuator
Rated output torque [lbs.ft.]	15,041
Rated output torque [inch.lbs.]	180,486
Rated output torque [Nm]	20,392
Approximate weight (lbs.)	470

SERVICE CONDITIONS

Version	Weather-proof
Operating mode	OPEN - CLOSE duty
Enclosure protection	NEMA type 6P
Color	AUMA silver-grey (similar to RAL 7037)
Ambient temperature	-30 °C to +70 °C (-22 °F to +158 °F)
Nameplates	English - aluminum (US-AL)
Sealing elements	NBR - Nitrile Butadiene Rubber
Corrosion protection	KS

ELECTRICAL DATA

Mains voltage	480 Volts AC
Phase	3-Ph
Frequency	60 Hz
Type of duty	S2 - 15 min.
Motor protection	(D-1T-O140) 3 thermal switches, 1 N.C. contact per phase wired in series 140°C, class F insulation, tropicalized winding
Motor type	3 ph AC TENV motor, type AD/VD

MOTOR DATA

Motor designation	VD00090-4-0.25
Nominal power (HP)	1/3
Nominal power (kW)	0.25
Nominal speed (RPM)	1,680
Nominal current (FLA)	1.0
Current approx. I _{max} . (RTA)	1.6
Starting current (LRA)	5.2
COS	0.60

ACTUATOR FEATURES

SA model	SA 14.2
Output speed	9.6 RPM
Valve attachment	FA14
Output drive	FA14-B3 Ø=30mm; key width=8mm; key height 7mm
Mechanical position indicator	(11) with symbols OPEN and CLOSED, continuous
Torque switches	(6) single switches Ag (1 NC/1 NO) for each direction
Limit switches	(8.2) tandem switches Ag (2 NC/2 NO) for each direction (2 gear train 8 contacts)
Position transm.	(40.4) 4-20mA via EWG 4-wire system
Turns per stroke	53.5 turns per stroke at output drive act.
Operating time (seconds)	334
Reduction gearing	(10.1) Gearing with fixed reduction ratio
Reduction ratio	91:1

Salient Characteristics

Item: 1 - SA14.2/GS200.3/AM02.1 (continued)

ACTUATOR FEATURES (continued)

Stem protection tube	Without stem tube, with protective screw plug, thread form G2 1/2" BSPP
Heater	(22.1) 110 V-250 V AC/DC self regulating PTC element: 5-20 W
Motor heater	(23.43) 380 V - 480 V motor compartment heater: 12.5 W
Torque switching	Setting range 74-185 lbs.ft.
Set to close lbs.ft.	185
Set to open lbs.ft.	185
Handwheel	12.5" (315mm)
Close direction	RH - clockwise
Limit switching	(300) 1.5-500 rev/stroke adjustable
Lubricant	F15 Shell ALVANIA 1029
Electrical connection	(S0-000) actuator plug for mounting AM/SEM/AC

GS GEARBOX

GS model	GS 200.3
Version 1	Without
Version 2	Standard
Reduction ratio i	214:1
Mechanical adv.	81.3
Valve coupling	Unbored valve shaft coupling
Coupling type	steel
Explosion protection	(0) not suitable for potentially explosive atmospheres
Mounting position	Position A
Swing angle	80 - 100 degrees, adjustable
Set to degrees	92
Version	RR: input shaft clockwise, clockwise rotation of the valve shaft
Valve attachment	FA30 according to MSS SP-101 with female pilot D=230mm
Housing material	Cast iron housing GJL-250
Worm wheel material	Bronze worm wheel
Gearbox input	(FA14-EW30) FA14, input shaft $\varnothing=30\text{mm}$
Lubricant	F15 Shell ALVANIA 1029
Enclosure	IP68-8-Z - max. 26' (8m) head of water, with pointer cover

ACTUATOR CONTROLS

Enclosure	AM 02.1
Mounting position	Position A
Controls	(41.00) Standard interface board
Type of signal	(46.14) 110 - 125 V AC internal, or external supply
Input signals	(42.02) OPEN - STOP - CLOSE
Power supply unit	(49.2100P) Transformer, customer output: 115 V AC
Motor controls	(B00.01) Reversing contactors for power class A1
Motor protection	(54.01) Thermal switch
Selector switch	(51.02) 3 positions, 2 levels
LOCAL operation	Push buttons OPEN, STOP, CLOSE
Indication lights	OPEN-red, FAULT-yellow, CLOSE-green

Salient Characteristics

Item: 1 - SA14.2/GS200.3/AM02.1 (continued)

ACTUATOR CONTROLS (continued)

Control elements	(52.19) Push buttons OPEN-STOP-CLOSE; 3 indicating lights; OPEN: Red, FAULT: Yellow, CLOSE: Green
Mounting pos. local controls	Position A, selector switch at 6 o'clock in relation to base of controls (standard for SA/SQ)
Face plate	English-Spanish-French text: Open-Stop-Close/ Local-Off-Remote
Output signals	(44.03) OPEN-CLOSE/LOCAL-REMOTE
Version logic	Lights illuminated in mid travel
Seating CLOSED	Limit switch
Seating OPEN	Limit switch
Fault signal	Torque included in collective fault signal (S2 '6'=ON)
Self locking LOCAL	With
Self locking REMOTE	Without
Heater	(53.38) Control unit heater internally supplied, motor heater 380V-480V internal supply
2nd digit	(A) Torque switch by-pass for both directions with plug/socket
Electrical connection	(SB-080) plug/socket 100mm, 2 x ¾" NPT; 1 x 1 ¼" NPT

OPTIONAL EXTRAS

Double sealed at customer connection XK
Padlock on selector switch
Replacement actuator label reqd.

DRAWINGS

ACTUATOR DIMENSIONAL DWG	DDS00H311EAAKC341
OUTPUT DRIVE/MOUNTING FLANGE DWG	SK099241
POINT-TO-POINT WIRING DWG	MSP1A10KC5--F2JC1TPA00R1AB-0ED-000

OPERATION MANUALS

ACTUATOR OPERATION MANUAL	(click here)
GEARBOX OPERATION MANUAL	(click here)
WIRING DIAGRAM LEGEND	(click here)

Salient Characteristics

Item 2 – Auma SA07.2/GS63.3 Gearbox/AM01.1 Controls (QTY 1)

Salient Characteristics:

Salient Characteristics

Item: 2 - SA07.2/GS63.3/AM01.1

QUOTATION

AUMA product	Quarter-turn electric actuator
Rated output torque [lbs.ft.]	381
Rated output torque [inch.lbs.]	4,567
Rated output torque [Nm]	516
Approximate weight (lbs.)	84

SERVICE CONDITIONS

Version	Weather-proof
Operating mode	OPEN - CLOSE duty
Enclosure protection	NEMA type 6P
Color	AUMA silver-grey (similar to RAL 7037)
Ambient temperature	-30 °C to +70 °C (-22 °F to +158 °F)
Nameplates	English - aluminum (US-AL)
Sealing elements	NBR - Nitrile Butadiene Rubber
Corrosion protection	KS

ELECTRICAL DATA

Mains voltage	480 Volts AC
Phase	3-Ph
Frequency	60 Hz
Type of duty	S2 - 15 min.
Motor protection	(D-1T-O140) 3 thermal switches, 1 N.C. contact per phase wired in series 140°C, class F insulation, tropicalized winding
Motor type	3 ph AC TENV motor, type AD/VD

MOTOR DATA

Motor designation	VD00063-4-0.02
Nominal power (HP)	1/16
Nominal power (kW)	0.02
Nominal speed (RPM)	1,680
Nominal current (FLA)	0.4
Current approx. I _{max} . (RTA)	0.4
Starting current (LRA)	1.0
COS	0.40

ACTUATOR FEATURES

SA model	SA 07.2
Output speed	6.7 RPM
Valve attachment	FA10
Output drive	FA10-B3 Ø=20mm; key width=6mm; key height 6mm
Mechanical position indicator	(11) with symbols OPEN and CLOSED, continuous
Torque switches	(6) single switches Ag (1 NC/1 NO) for each direction
Limit switches	(8.2) tandem switches Ag (2 NC/2 NO) for each direction (2 gear train 8 contacts)
Position transm.	(40.4) 4-20mA via EWG 4-wire system
Turns per stroke	12.75 turns per stroke at output drive act.
Operating time (seconds)	114
Reduction gearing	(10.1) Gearing with fixed reduction ratio
Reduction ratio	22.5:1

Salient Characteristics

Item: 2 - SA07.2/GS63.3/AM01.1 (continued)

ACTUATOR FEATURES (continued)

Stem protection tube	Without stem tube, with protective screw plug, thread form G1 1/4" BSPP
Heater	(22.1) 110 V-250 V AC/DC self regulating PTC element: 5-20 W
Motor heater	(23.43) 380 V - 480 V motor compartment heater: 12.5 W
Torque switching	Setting range 7-22 lbs.ft.
Set to close lbs.ft.	22
Set to open lbs.ft.	22
Handwheel	6.3" (160mm)
Close direction	RH - clockwise
Limit switching	(300) 1.5-500 rev/stroke adjustable
Lubricant	F15 Shell ALVANIA 1029
Electrical connection	(S0-000) actuator plug for mounting AM/SEM/AC

GS GEARBOX

GS model	GS 63.3
Version 1	Without
Version 2	Standard
Reduction ratio i	51:1
Mechanical adv.	17.3
Valve coupling	Unbored valve shaft coupling
Coupling type	steel
Explosion protection	(0) not suitable for potentially explosive atmospheres
Mounting position	Position A
Swing angle	92 degrees, adjusted at factory
Version	RR: input shaft clockwise, clockwise rotation of the valve shaft
Valve attachment	FA12-N according to MSS SP-101 without pilot
Housing material	Cast iron housing GJL-250
Worm wheel material	Bronze worm wheel
Gearbox input	(FA10-EW20) FA10, input shaft $\varnothing=20\text{mm}$
Lubricant	F15 Shell ALVANIA 1029
GS name plate	English - self-adhesive polyester (PET) label (US-E1)
Enclosure	IP68-8-Z - max. 26' (8m) head of water, with pointer cover

ACTUATOR CONTROLS

Enclosure	AM 01.1
Mounting position	Position A
Controls	(41.00) Standard interface board
Type of signal	(46.14) 110 - 125 V AC internal, or external supply
Input signals	(42.02) OPEN - STOP - CLOSE
Power supply unit	(49.2100P) Transformer, customer output: 115 V AC
Motor controls	(B00.01) Reversing contactors for power class A1
Motor protection	(54.303B) Thermal switch, with ABB T16 thermal overload relay; 0.31-0.41A
Reset type	(54.505) overload relay automatically reset
Overload relay setting	0.4

Salient Characteristics

Item: 2 - SA07.2/GS63.3/AM01.1 (continued)

ACTUATOR CONTROLS (continued)

Selector switch	(51.02) 3 positions, 2 levels
LOCAL operation	Push buttons OPEN, STOP, CLOSE
Indication lights	OPEN-red, FAULT-yellow, CLOSE-green
Control elements	(52.19) Push buttons OPEN-STOP-CLOSE; 3 indicating lights; OPEN: Red, FAULT: Yellow, CLOSE: Green
Mounting pos. local controls	Position A, selector switch at 6 o'clock in relation to base of controls (standard for SA/SQ)
Face plate	English-Spanish-French text: Open-Stop-Close/Local-Off-Remote
Output signals	(44.03) OPEN-CLOSE/LOCAL-REMOTE
Version logic	Lights illuminated in mid travel
Seating CLOSED	Limit switch
Seating OPEN	Limit switch
Fault signal	Torque included in collective fault signal (S2 '6'=ON)
Self locking LOCAL	With
Self locking REMOTE	Without
Heater	(53.38) Control unit heater internally supplied, motor heater 380V-480V internal supply
2nd digit	(A) Torque switch by-pass for both directions with plug/socket
Electrical connection	(SB-080) plug/socket 100mm, 2 x ¾" NPT; 1 x 1 ¼" NPT

OPTIONAL EXTRAS

Double sealed at customer connection XK
Padlock on selector switch
Replacement actuator label reqd.

DRAWINGS

ACTUATOR DIMENSIONAL DWG	DDS00C211AAAAA341
OUTPUT DRIVE/MOUNTING FLANGE DWG	SK099241
POINT-TO-POINT WIRING DWG	* MSP1A10KCS--F2JC2TPA00R1AB-0ED-000

OPERATION MANUALS

ACTUATOR OPERATION MANUAL	(click here)
GEARBOX OPERATION MANUAL	(click here)
WIRING DIAGRAM LEGEND	(click here)

Unavailable drawings will be generated upon receipt of order.

Salient Characteristics

Item 3 – Auma SA14.6/AM02.1 (QTY 1)

Salient Characteristics:

Item: 3 - SA14.6/AM02.1

QUOTATION

AUMA product
Rated output torque [lbs.ft.]
Rated output torque [Nm]
Max. thrust
Approximate weight (lbs.)

Multi-turn electric actuator
370
502
36000 lbs (160 kN)
135

SERVICE CONDITIONS

Version
Operating mode
Enclosure protection
Color
Ambient temperature
Nameplates
Sealing elements
Corrosion protection

Weather-proof
OPEN - CLOSE duty
NEMA type 6P
AUMA silver-grey (similar to RAL 7037)
-30 °C to +70 °C (-22 °F to +158 °F)
English - aluminum (US-AL)
NBR - Nitrile Butadiene Rubber
KS

ELECTRICAL DATA

Mains voltage
Phase
Frequency
Type of duty
Motor protection

480 Volts AC
3-Ph
60 Hz
S2 - 15 min.
(D-1T-O140) 3 thermal switches, 1 N.C. contact
per phase wired in series 140°C, class F
insulation, tropicalized winding
3 ph AC TENV motor, type AD/VD

Motor type

MOTOR DATA

Motor designation
Nominal power (HP)
Nominal power (kW)
Nominal speed (RPM)
Nominal current (FLA)
Current approx. I_{max}. (RTA)
Starting current (LRA)
COS

VD00090-2-0.80
1
0.80
3,360
3.6
5.0
18.0
0.51

ACTUATOR FEATURES

SA model
Output speed
Valve attachment
Output drive
Mechanical position indicator
Torque switches

SA 14.6
19 RPM
FA14
FA14-A unmachined
(11) with symbols OPEN and CLOSED, continuous
(6) single switches Ag (1 NC/1 NO) for each
direction
(8.2) tandem switches Ag (2 NC/2 NO) for each
direction (2 gear train 8 contacts)
(40.4) 4-20mA via EWG 4-wire system
44.00
139
(10.1) Gearing with fixed reduction ratio
76:1

Limit switches

Position transm.
Turns per stroke
Operating time (seconds)
Reduction gearing
Reduction ratio

Salient Characteristics

Item: 3 - SA14.6/AM02.1 (continued)

ACTUATOR FEATURES (continued)

Stem protection tube	Without stem tube, with protective screw plug, thread form G2 1/2" BSPP
Heater	(22.1) 110 V-250 V AC/DC self regulating PTC element: 5-20 W
Motor heater	(23.43) 380 V - 480 V motor compartment heater: 12.5 W
Torque switching	Setting range 150-370 lbs.ft.
Set to close lbs.ft.	370
Set to open lbs.ft.	370
Handwheel	12.5" (315mm)
Stall TRQ @ 100% nom. voltage (lbs.ft.)	690
Break TRQ @ 100% nom. voltage (lbs.ft.)	370
5 min. run TRQ @ 100% nom. voltage (lbs.ft.)	369
10 min. run TRQ @ 100% nom. voltage (lbs.ft.)	295
15 min. run TRQ @ 100% nom. voltage (lbs.ft.)	221
Overall handwheel mech. adv.	4.5
Close direction	RH - clockwise
Limit switching	(300) 1.5-500 rev/stroke adjustable
Lubricant	F15 Shell ALVANIA 1029
Electrical connection	(50-000) actuator plug for mounting AM/SEM/AC

ACTUATOR CONTROLS

Enclosure	AM 02.1
Mounting position	Position A
Controls	(41.00) Standard interface board
Type of signal	(46.14) 110 - 125 V AC internal, or external supply
Input signals	(42.02) OPEN - STOP - CLOSE
Power supply unit	(49.2100P) Transformer, customer output: 115 V AC
Motor controls	(B00.01) Reversing contactors for power class A1
Motor protection	(54.311A) Thermal switch, with ABB T16 thermal overload relay; 4.2-5.7A
Reset type	(54.505) overload relay automatically reset
Overload relay setting	5
Selector switch	(51.02) 3 positions, 2 levels
LOCAL operation	Push buttons OPEN, STOP, CLOSE
Indication lights	OPEN-red, FAULT-yellow, CLOSE-green
Control elements	(52.19) Push buttons OPEN-STOP-CLOSE; 3 indicating lights; OPEN: Red, FAULT: Yellow, CLOSE: Green
Mounting pos. local controls	Position A, selector switch at 6 o'clock in relation to base of controls (standard for SA/SQ)
Face plate	English-Spanish-French text: Open-Stop-Close/Local-Off-Remote
Output signals	(44.03) OPEN-CLOSE/LOCAL-REMOTE
Version logic	Lights illuminated in mid travel
Seating CLOSED	Limit switch
Seating OPEN	Limit switch
Fault signal	Torque included in collective fault signal (S2 '6'=ON)
Self locking LOCAL	With
Self locking REMOTE	Without

Salient Characteristics

Item: 3 - SA14.6/AM02.1 (continued)

ACTUATOR CONTROLS (continued)

Heater

(53.38) Control unit heater internally supplied,
motor heater 380V-480V internal supply

2nd digit

(A) Torque switch by-pass for both directions
with plug/socket

Electrical connection

(SB-080) plug/socket 100mm, 2 x ¾" NPT; 1 x 1 ¼"
NPT

OPTIONAL EXTRAS

Double sealed at customer connection XK

Padlock on selector switch

Replacement actuator label reqd.

DRAWINGS

ACTUATOR DIMENSIONAL DWG

[DDS100001EAAKC341](#)

OUTPUT DRIVE/MOUNTING FLANGE DWG

[SK099489](#)

POINT-TO-POINT WIRING DWG

* MSP1A10KC5--F2JC2TPA00R1AB-0ED-000

OPERATION MANUALS

ACTUATOR OPERATION MANUAL

[\(click here\)](#)

WIRING DIAGRAM LEGEND

[\(click here\)](#)

Salient Characteristics

Item 4 – Solid State Starters for actuators (QTY 3)

Salient Characteristics:

1-phase AC motor with integral starting capacitor and solid state switch (CSIR), type IM B9 according to IEC 60034-7, IC410 cooling procedure according to IEC 60034-6