

Chain actuators

VARIMAG CC10

Description/function

The electric Varimag chain actuators, especially the CC10 types, have been designed for pivot-hung windows with a minimum height of 1 000 mm. The compact dimensions make flexible installation possible. The robust aluminium housing has an anodized coating. The actuator is deactivated at its limit positions by an embedded limit switch. The actuators are either available in single-phase alternative current (AC) or in direct current (DC). Single-phase actuators have a built in relay for multiple series connection. Thanks to the fixing parts supplied, the actuators are easy to mount. The fixing bars and the articulated section at the front fall within the scope of supply. A special 2M85 W mounting bracket is available at extra cost for inward opening pivot-hung windows.

Electric al connections

Only trained staff may undertake the processes of setting into motion and connecting up to power sources. All valid specifications must be observed. Connections to the power supply are made using a 4x1 mm² connection cord (AC) or 2x1 mm² connection cord (DC), which should be ordered by the customer. The electric power supply is connected up to the corresponding terminals following the diagram shown overleaf.

The connection cord should be guided through the cover and then checked for leaks. The cover should be pulled tight and also checked for leaks. The stroke is reversed in accordance with the wiring diagram shown overleaf.

Assembly

The special installation instructions in the operating instructions must be observed. Due to their low push force, these actuators must not be used on skylights. The actuators must be installed using the fixing parts provided (see accessories). The articulated section must be fitted flush with the chain axis. Ensure that the grub bolt (see dimension drawing) is tighten firmly. No lateral forces may act on the chain. Fine adjustment can be undertaken at the eye bolt. After adjustment, ensure that the actuator deactivates with certainty in its limit positions. Electric cables (connection cord) must be routed so that damage resulting from crushing, deflection or traction is not possible.

Maintenance

The actuators contain greasing, which under normal operating conditions will suffice for around 10 000 double strokes. Only the actuator chain should be cleaned and a thin layer of grease applied from time to time.



The duration of life of the actuator depends greatly on the application for which it is used (e.g. temperature, relationship between stroke-force-cycles and environmental factors) and must if necessary be calculated separately. At specified intervals, the window should also be checked for leaks and the actuator for precise deactivation. Defective motors may only be opened and repaired in our factory.

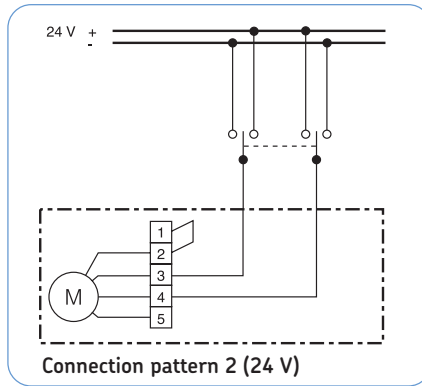
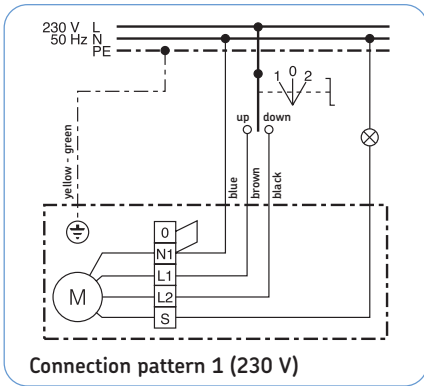
Accessories/version

- Actuators, silver anodized colour, other RAL colours on request
- 2M 85W window brackets
- Swivel bracket for window height < 1 000 mm
- Locking mounting bracket
- Winter garden control

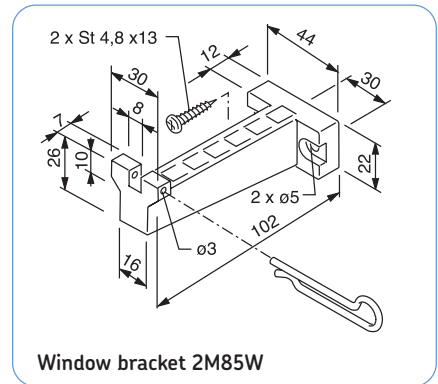
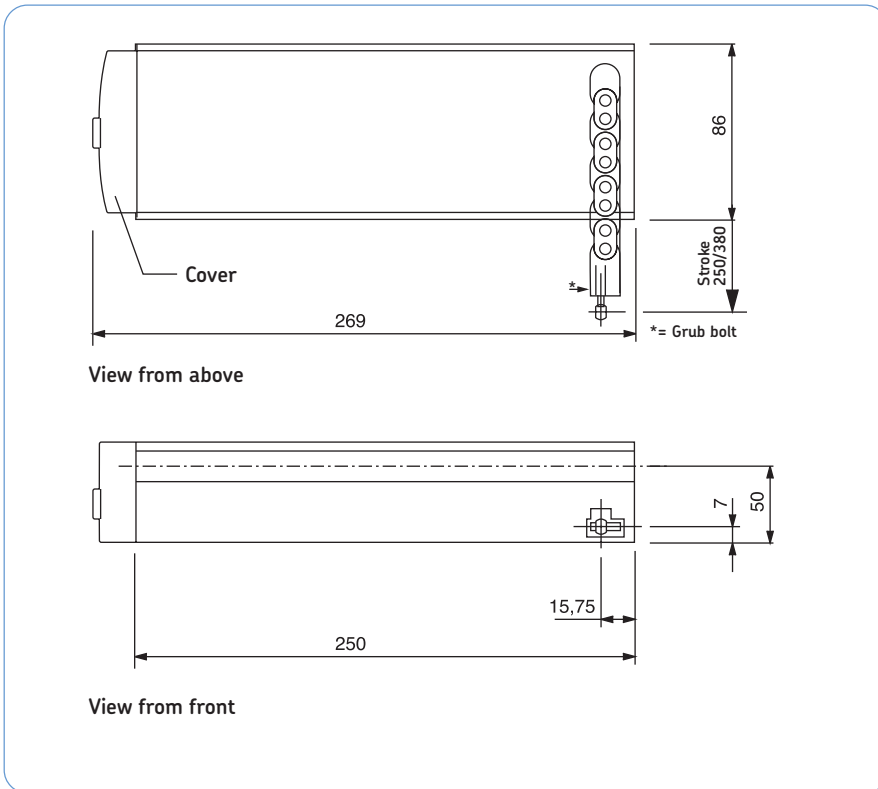
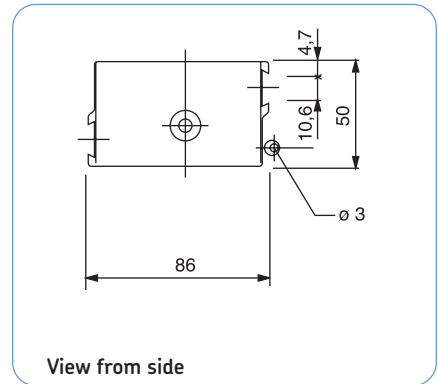
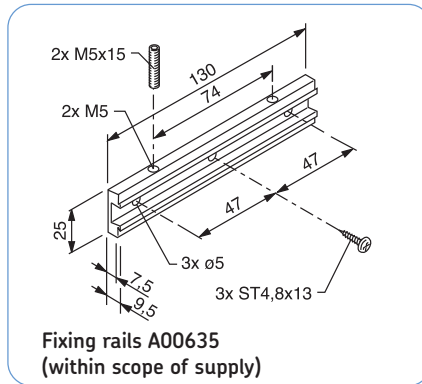
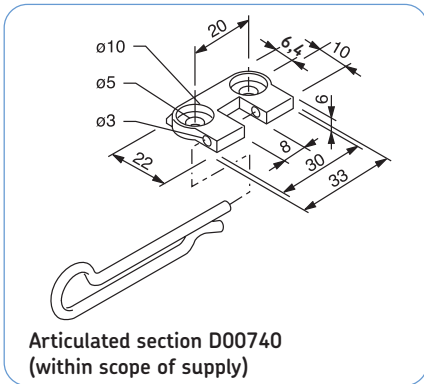
Technical data:	Unit	CC10... 230 V	CC10... 24 V
Push force	N	150	150
Pull force	N	300	300
Stroke, can be changed over	mm	250/380	250/380
Pushing speed	mm/s	38 to 45	38 to 45
Voltage/frequency	V/Hz	230/50	-
Voltage	V	-	24
Duty cycle	%	40	50
Power input	W	130	55
Current input	A	0,55	2,3
Ambient temperature	°C	-10 to +40	-10 to +40
Protection class	IP	20	20
Weight	kg	1,8	1,6



Chain actuators VARIMAG CC10



Connection pattern 1 to 2
 – with bridge = 250 mm stroke
 – without bridge = 380 mm stroke



Chain actuators

VARIMAG CC20

Description/function

The electric Varimag chain actuators, especially the CC20 types, have been designed for pivot-hung windows and skylights with a minimum height of 1 000 mm. The maximum window width must not exceed 1 500 mm. The compact dimensions make flexible installation possible. The robust aluminium housing has a silver-coloured anodized coating. When in its extended limit position, the actuator is deactivated by a built in Reed contact. An internal electric load deactivation mechanism (power limitation) is present at the retract limit position. The actuators are either available in single-phase alternative current (AC) or in direct current (DC). Single-phase actuators have a built in relay for multiple series connection. The fixing elements should be ordered separately depending on the application.

Electrical connections

Only trained staff may undertake the processes of setting into motion and connecting up to power sources. All valid specifications must be observed. Connections to the power supply are made using permanently connected 4x1 mm² cable (AC) or 2x1 mm² cable (DC), 1 metre in length, following the diagram shown overleaf.

Assembly

The special installation instructions in the operating instructions must be observed. The actuators must be installed using the fixing parts provided (see accessories). The articulated section must be fitted flush with the chain axis. No lateral forces may act on the chain. After adjustment, ensure that the actuator deactivates with certainty in its limit positions. Electric cords (connection cord) must be routed so that damage resulting from crushing, deflection or traction is not possible.

Maintenance

The actuators contain greasing, which under normal operating conditions will suffice for around 10 000 double strokes. Only the actuator chain should be cleaned and a thin layer of grease applied from time to time. The duration of life of the actuator depends greatly on the application for which it is used (e.g. temperature, relationship between stroke-force-cycles and environmental factors) and must if necessary be calculated separately. At specified intervals, the window should also be checked for leaks and the actuator for precise deactivation. Defective motors may only be opened and repaired in our factory.



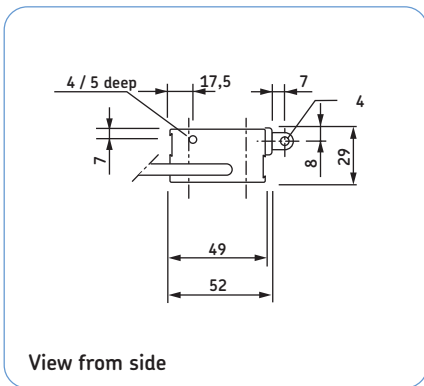
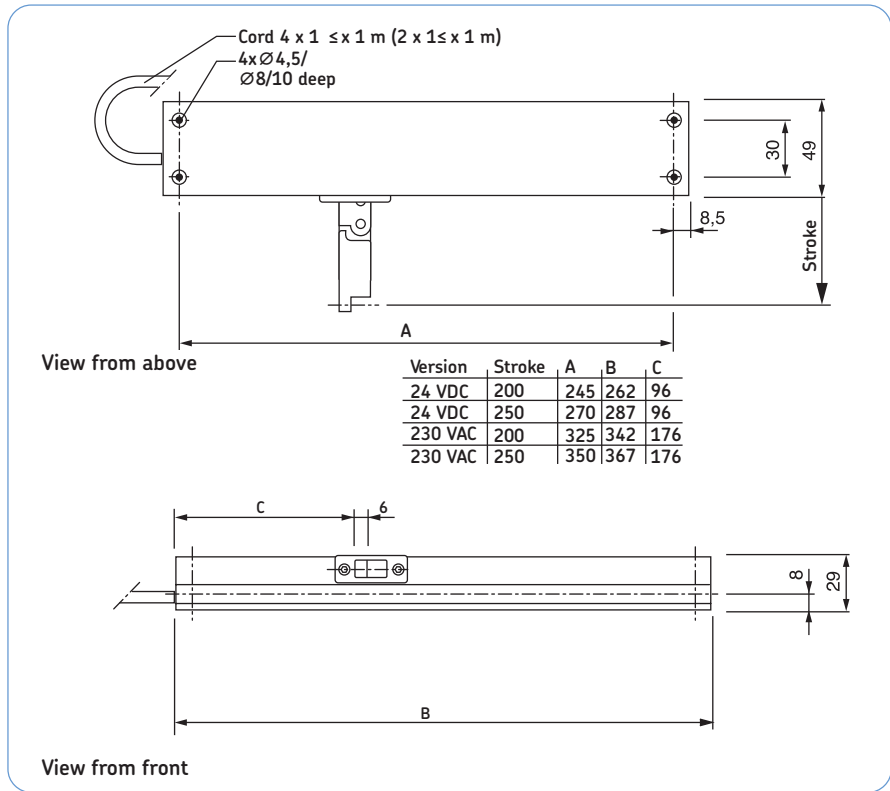
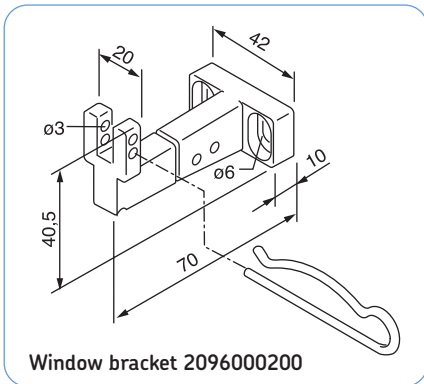
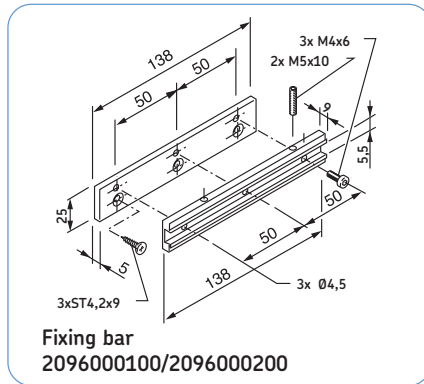
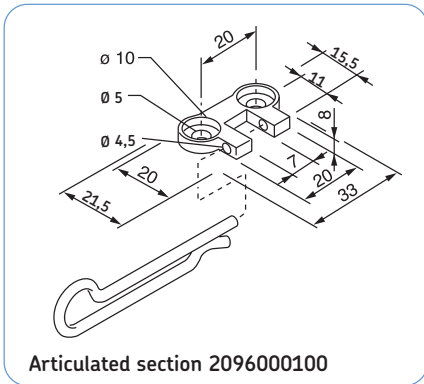
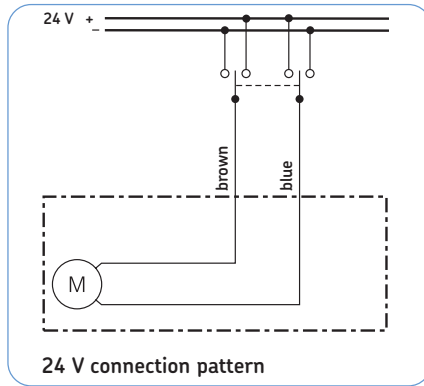
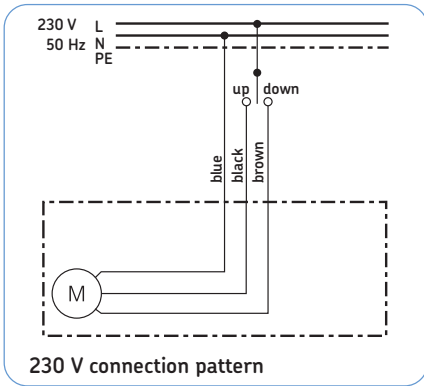
Accessories/version

- Actuators with stroke of 200/250 mm
- Actuators, silver anodized colour, other RAL colours on request
- Window bracket and fixing bar 2096000200
- Articulated section and fixing bar 2096000100
- Swivel bracket for window height < 1 000 mm
- Locking mounting bracket
- Winter garden control

Technical data:	Unit	CC20... 230 V	CC20... 24 V
Push force	N	200	200
Pull force	N	200	200
Stroke	mm	200/250	200/250
Pushing speed	mm/s	10 to 17	10 to 14
Voltage/frequency	V/Hz	230/50	-
Voltage	V	-	24
Duty cycle	%	40	50
Power input	W	35	20
Current input	A	0,15	0,8
Ambient temperature	°C	-10 to +40	-10 to +40
Protection class	IP	20	20
Weight	kg	0,8	0,8



Chain actuators VARIMAG CC20



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Chain actuators

VARIMAG CC30

Description/function

The electric Varimag chain actuators, especially the CC30 types, have been designed for pivot-hung windows and skylights with a minimum height of 1 000 mm. The maximum window width must not exceed 1500 mm. The compact dimensions make flexible installation possible. The robust plastic housing is available in various colours. The actuator is deactivated at its limit positions by an embedded Reed contact. The stroke can be adjusted in 12,5 steps within a range of 13–310 mm. The actuators are either available in single-phase alternative current (AC) or in direct current (DC). Single-phase actuators have a built in relay for multiple series connection.

Electrical connections

Only trained staff may undertake the processes of setting into motion and connecting up to power sources. All valid specifications must be observed. Connections to the power supply are made using a 4x1 mm² connection cord.

Assembly

The special installation instructions in the operating instructions must be observed. The actuators must be installed using the fixing parts provided (see accessories). The articulated section must be fitted flush with the chain axis. No lateral forces may act on the chain. Ensure that the actuator deactivates in its limit positions. Electric cables (connection cord) must be routed so that damage resulting from crushing, deflection or traction is not possible.

Maintenance

The actuators contain greasing, which under normal operating conditions will suffice for around 10 000 double strokes. Only the actuator chain should be cleaned and a thin layer of grease applied from time to time. The duration of life of the actuator depends greatly on the application for which it is used (e.g. temperature, relationship between stroke-force-cycles and environmental factors) and must if necessary be calculated separately. At specified intervals, also check the actuator for precise deactivated.



Defective motors may only be opened and repaired in our factory.

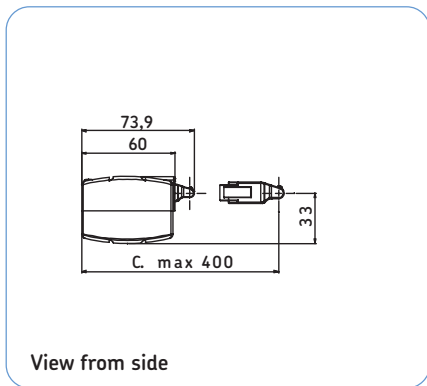
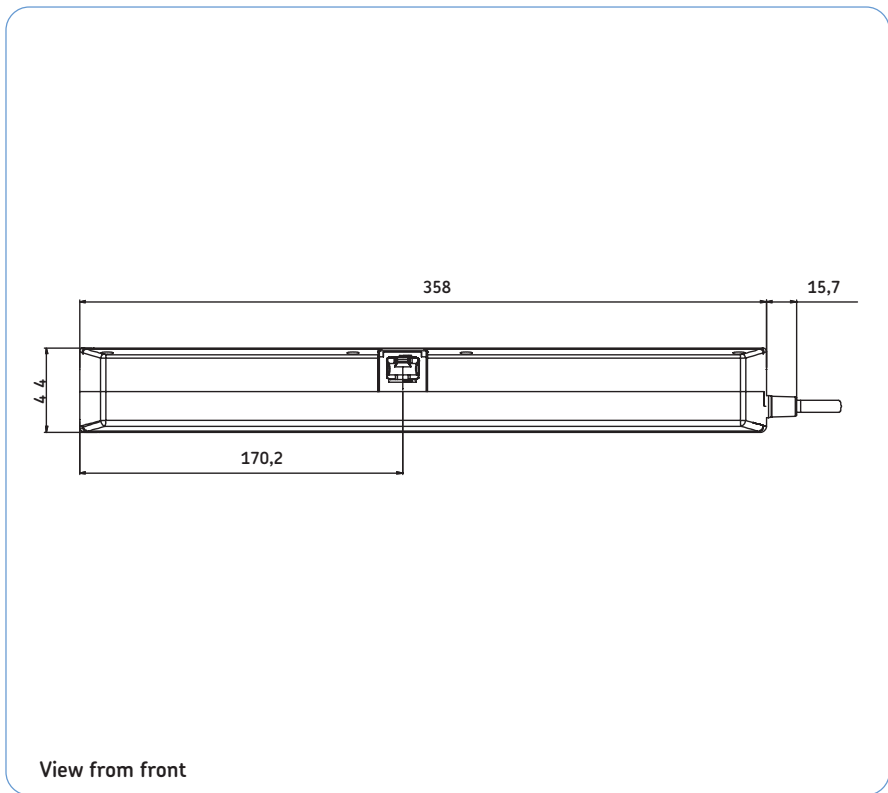
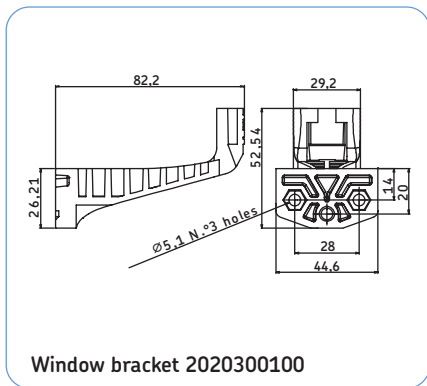
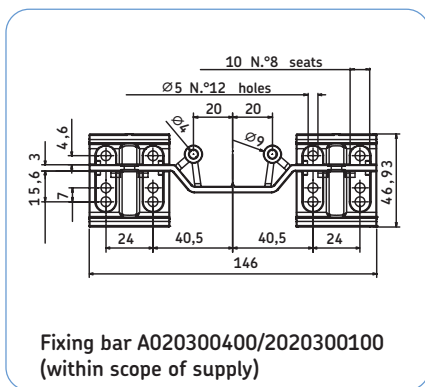
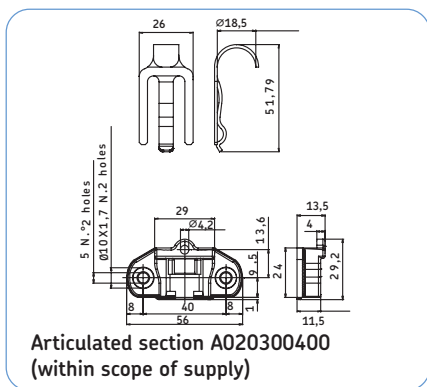
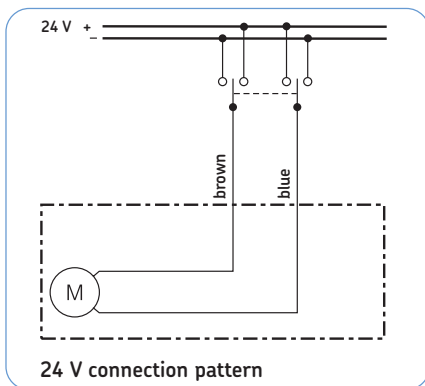
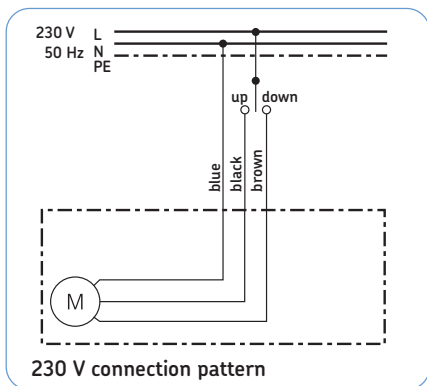
Accessories/version

- Actuators with stroke of 400 mm, adjustable stroke
- Silver and white actuators, other RAL colours on request
- Window bracket 2020300100
- Articulated section and fixing bar A020300400
- Swivel bracket for window heights < 1 000 mm
- Locking mounting bracket
- Winter garden control

Technical data:	Unit	CC30... 230 V	CC30... 24 V
Push force	N	250	250
Pull force	N	250	250
Stroke, adjustable	mm	400	400
Pushing speed	mm/s	26 to 28	28 to 32
Voltage/frequency	V/Hz	230/50	-
Voltage	V	-	24
Duty cycle	%	40	40
Thermal protection	°C	+140	-
Power input	W	100	24
Current input	A	0,45	1
Ambient temperature	°C	-10 to +40	-10 to +40
Protection class	IP	22	22
Weight	kg	1,3	1,6



Chain actuators VARIMAG CC30



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Chain actuators

VARIMAG CC40

Description/function

The electric Varimag chain actuators, especially the CC40 types, have been designed for pivot-hung windows and skylights with a minimum height of 1 000 mm. The maximum window width must not exceed 1 500 mm. The compact dimensions make flexible installation possible. The robust aluminium housing has a silver-coloured anodized coating. The specified stroke is fixed. The actuator is deactivated at its limit positions by an embedded Reed contact. The actuators are either available in single-phase alternative current (AC) or in direct current (DC). Single-phase actuators have a built in relay for multiple series connection. The fixing elements should be ordered separately depending on the application.

Electrical connections

Only trained staff may undertake the processes of setting into motion and connecting up to power sources. All valid specifications must be observed. Connections to the power supply are made using a connection cord with an angled plug (4x1 mm² (AC) or 2x1 mm² (DC) following the diagram shown overleaf.

Assembly

The special installation instructions in the operating instructions must be observed. The actuators must be installed using the fixing parts provided (see accessories). The articulated section must be fitted flush with the chain axis. Ensure that the grub bolt (see dimension drawing) is tightened firmly. No lateral forces may act on the chain. Fine adjustment can be undertaken at the eye bolt. After adjustment, ensure that the actuator deactivates with certainty in its limit positions. Electric cables (connection cord) must be routed so that damage resulting from crushing, deflection or traction is not possible.

Maintenance

The actuators contain greasing, which under normal operating conditions will suffice for around 10 000 double strokes. Only the actuator chain should be cleaned and a thin layer of grease applied from time to time. The duration of life of the actuator depends greatly on the application for which it is used (e.g. temperature, relationship between stroke-force-cycles and environmental factors) and must if necessary be calculated



separately. At specified intervals, the window should also be checked for leaks and the actuator for precise deactivation. Defective motors may only be opened and repaired in our factory.

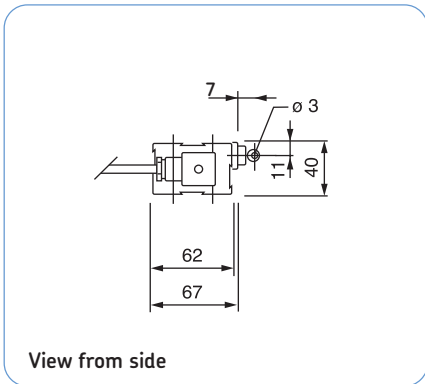
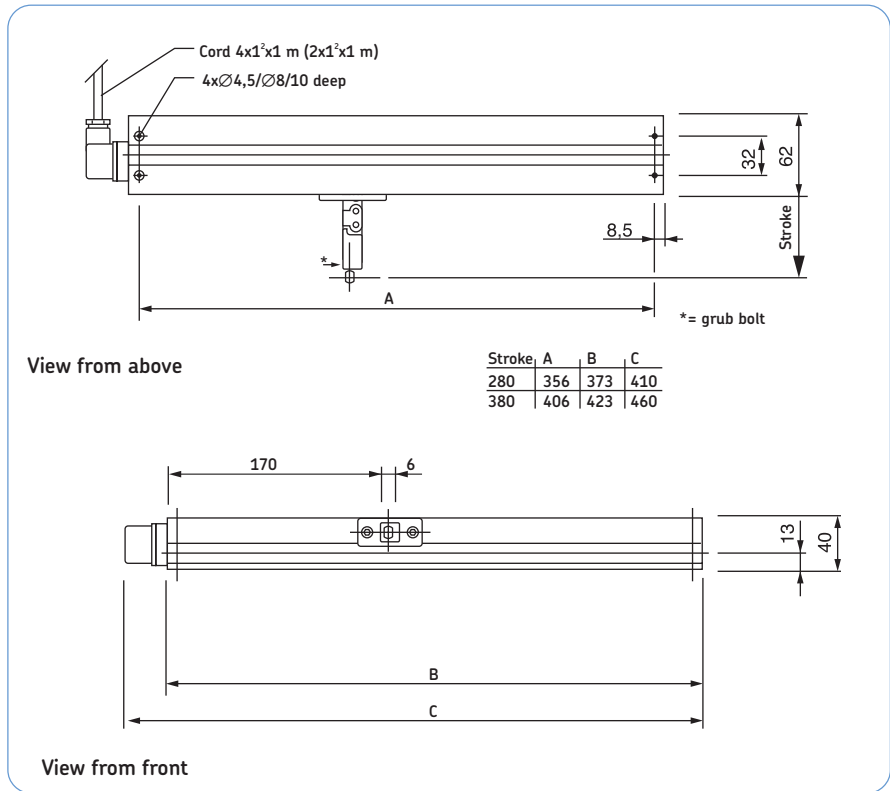
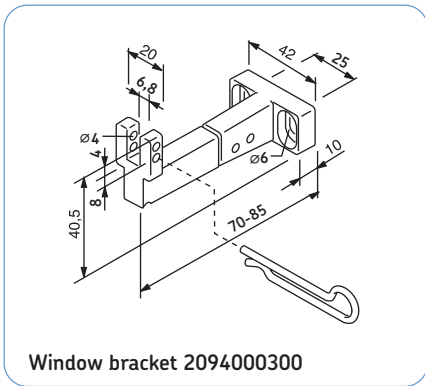
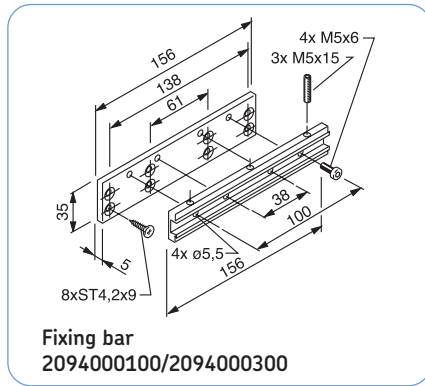
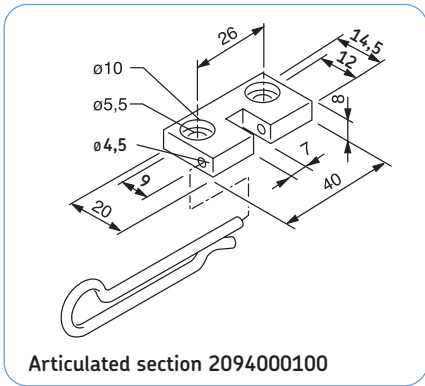
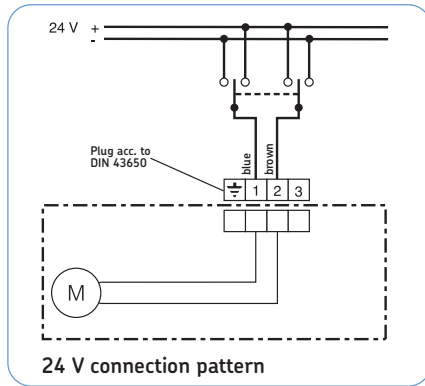
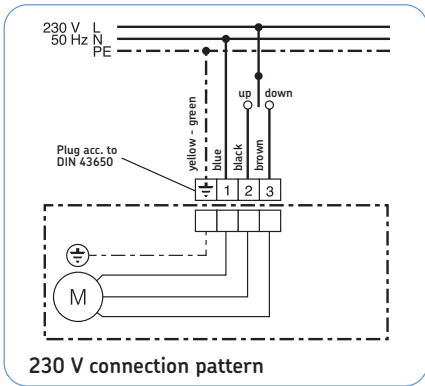
Accessories/version

- Actuators with stroke of 280/380 mm
- Actuators, silver anodized colour, other RAL colours on request
- Window bracket and fixing bar 2094000300
- Articulated section and fixing bar 2094000100
- Swivel bracket for window heights < 1 000 mm
- Locking mounting bracket
- Winter garden control

Technical data:	Unit	CC40... 230 V	CC40... 24 V
Push force	N	350	350
Pull force	N	350	350
Stroke	mm	280/380	280/380
Pushing speed	mm/s	15 to 18	16 to 19
Voltage/frequency	V/Hz	230/50	-
Voltage	V	-	24
Duty cycle	%	40	50
Thermal protection	°C	+130	-
Power input	W	110	25
Current input	A	0,45	1
Ambient temperature	°C	-10 to +40	-10 to +40
Protection class	IP	22	22
Weight	kg	1,8	1,8



Chain actuators VARIMAG CC40



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Chain actuators

VARIMAG CC50

Description/function

The electric Varimag chain actuators, especially the CC50 types, have been designed for pivot-hung windows and skylights with a minimum height of 1 000 mm. The maximum window width must not exceed 1 500 mm. The compact dimensions make flexible installation possible. The robust aluminium housing has a silver-coloured anodized coating. The specified stroke is fixed. The actuator is deactivated at its limit positions by an embedded Reed contact. The actuator has a robust link chain. The actuators are either available in single-phase alternative current (AC) or in direct current (DC). Single-phase actuators have a built in relay for multiple series connection. The fixing elements should be ordered separately depending on the application.

Electrical connections

Only trained staff may undertake the processes of setting into motion and connecting up to power sources. All valid specifications must be observed. Connections to the power supply are made using a connection cord with angled plug 4x1 mm² (AC) or 2x1 mm² (AC) following the diagram shown overleaf.

Assembly

The special installation instructions in the operating instructions must be observed. The actuators must be installed using the fixing parts provided (see accessories). The articulated section must be fitted flush with the chain axis. Ensure that the grub bolt (see dimension drawing) is tightened firmly. No lateral forces may act on the chain. Fine adjustment can be undertaken at the eye bolt. After adjustment, ensure that the actuator deactivates with certainty in its limit positions. Electric cables (connection cord) must be routed so that damage resulting from crushing, deflection or traction is not possible.

Maintenance

The actuators contain greasing, which under normal operating conditions will suffice for around 10 000 double strokes. Only the actuator chain should be cleaned and a thin layer of grease applied from time to time. The duration of life of the actuator depends greatly on the application for which it is used (e.g. temperature, relationship between stroke-force-cycles and environmental factors) and must if necessary be calculated separately.



At specified intervals, the window should also be checked for leaks and the actuator for precise deactivation. Defective motors may only be opened and repaired in our factory.

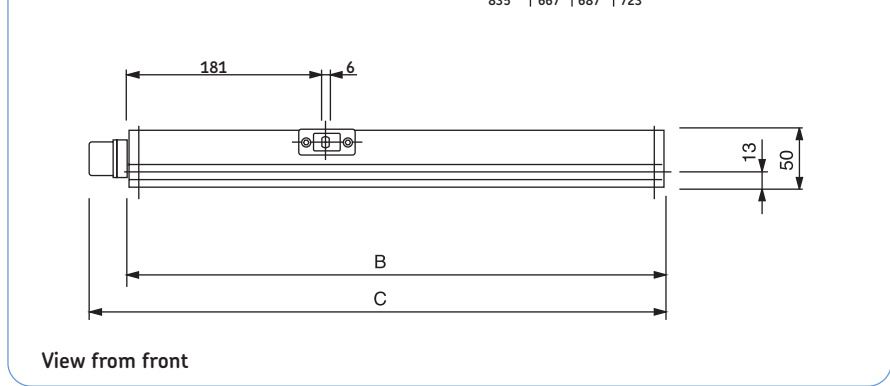
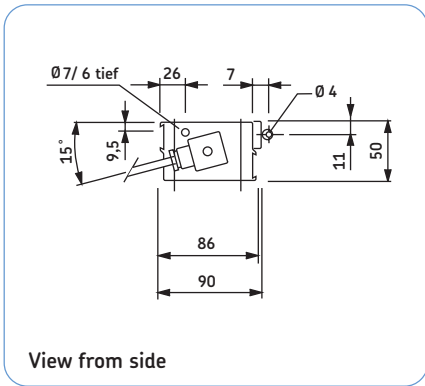
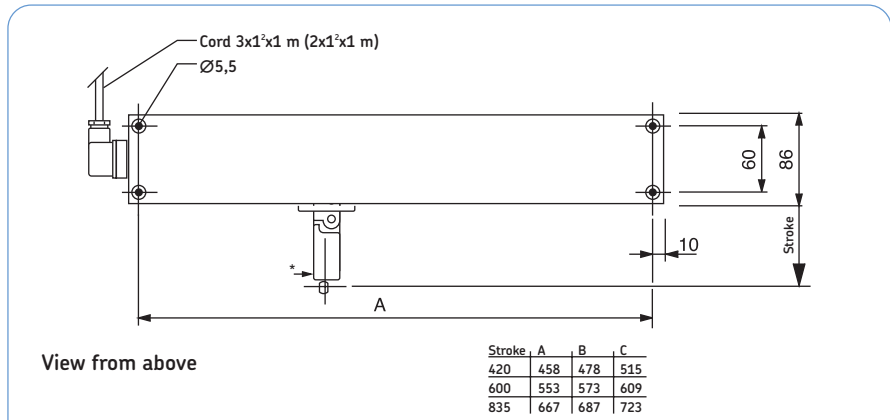
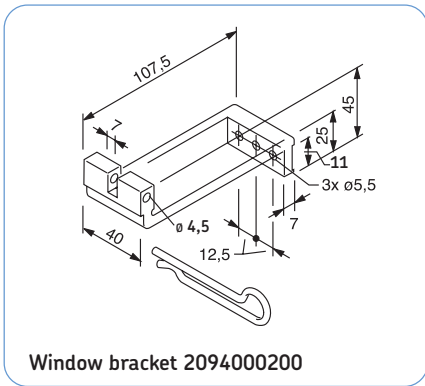
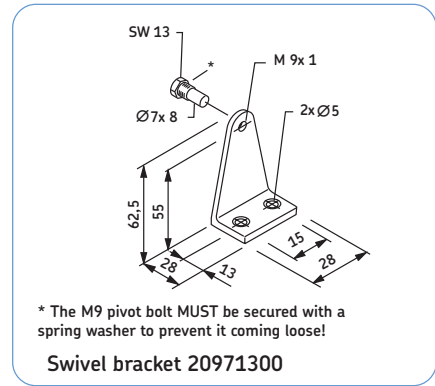
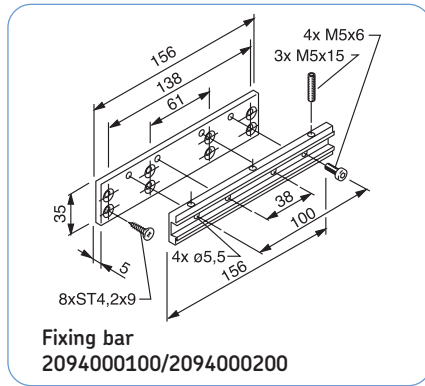
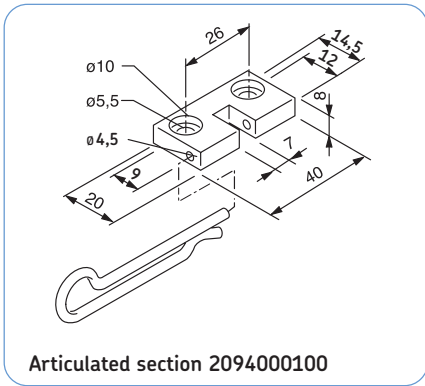
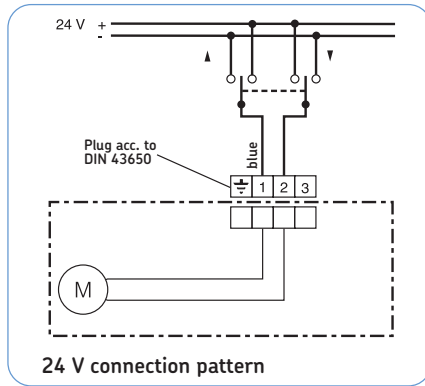
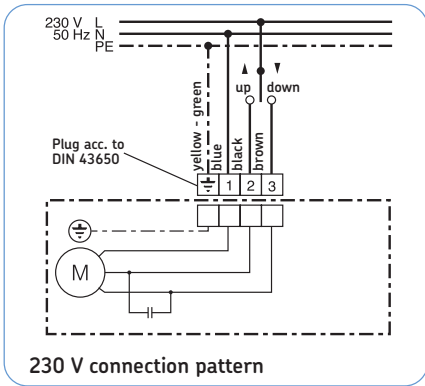
Accessories/version

- Actuators with stroke of 420, 600 and 835 mm (only 24V DC)
- Actuators, silver anodized colour, other RAL colours on request
- Window bracket and fixing bar 2094000200
- Articulated section and fixing bar 2094000100
- Swivel bracket for window height < 1 000 mm
- Locking mounting bracket
- Winter garden control

Technical data:	Unit	CC50... 230 V	CC50... 24 V	CC50... 24 V (S=835)
Push force	N	400	400	200
Pull force	N	400	400	400
Stroke (S)	mm	420/600	420/600	835
Pushing speed	mm/s	22 to 28	17 to 38	17 to 38
Voltage/frequency	V/Hz	230/50	-	-
Voltage	V	-	24	24
Duty cycle	%	45	50	50
Thermal protection	°C	+130	-	-
Power input	W	160	50	50
Current input	A	0,7	2,3	2,3
Ambient temperature	°C	-10 to +40	-10 to +40	-10 to +40
Protection class	IP	22	22	22
Weight	kg	4,0	4,0	4,5



Chain actuators VARIMAG CC50



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