



### [Rx Assignment] Rx

[R1 Assignment] R1, [R2 Assignment] R2, [R3 Assignment] R3, [R4 Assignment] R4, [R5 Assignment] R5, [R6 Assignment] R6, [R60 Assignment] R60, [R61 Assignment] R61, [R62 Assignment] R62, [R63 Assignment] R63, [R64 Assignment] R64, [R65 Assignment] R65, [R66 Assignment] R66

It is used to assign the relay to an event or a function. The following table gives the possible settings:

If the output is set to [CDxx] CDxx or [Cxxx] Cxxx and has been enabled, transition to operating state Fault such as, but not limited to, communication interruption, will not disable the output.

## ⚠ WARNING

### LOSS OF CONTROL

Only set the output to [CDxx] CDxx or [Cxxx] Cxxx after having verified that this setting cannot result in unsafe conditions including communication interruption.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

Setting	Code / Value	Description
[Not Assigned]	NO	Not assigned.  <b>NOTE:</b> In this case, the output can be controlled via the internal parameter OL1R (refer to the communication parameter addresses file). By default, if an error (such as a communication interruption is detected), the output remains unchanged. Use the parameter [Enable Rx Fallback] r X F to disable the output in case of error detection.  <b>Factory setting</b> <sup>(1)</sup>
[Warning Grp 1]... [Warning Grp 5]	AG1...AG5	Warning group 1 to Warning group 5.
[Slipping warn]	ANA	Anti-veering warning
[AI1 4-20 Warning]... [AI5 4-20 Warning]	AP1...AP5	4-20 mA loss warning on AI <sup>(3)</sup>

Setting	Code / Value	Description
[Neg Torque]	ATS	Actual torque sign
[Brake Contact Warn]	BCA	Brake contact warning
[Brake Sequence]	BLC	Brake sequence <sup>(2)</sup> The output is automatically configured to this function by setting the parameter [Brake assignment] BLC.
[HMI L/R cmd]	BMP	Control via the Graphic Display Terminal is active. (only active with Local/Remote button)
[BR Thermal Warning]	BOA	Braking resistor temperature warning.
[DBR Active]	BRAS	DBR Active.
[In braking]	BRS	In braking sequence
[Load Mvt Warn]	BSA	Brake speed warning
[CB Stop Pulse]	CBDP	Circuit Breaker stop pulse <sup>(2)</sup> The output is automatically configured to this function by setting the parameter [CB stop pulse activated] CBDP.
[CB Start Pulse]	CBEP	Circuit Breaker start pulse <sup>(2)</sup> The output is automatically configured to this function by setting the parameter [CB start pulse activated] CBEP.
[CD00]...[CD15]	CD00..CD15	Bit x digital input ctrl word (e.g. virtual digital input CMD.0...CMD.15). The state of the output is modified accordingly with the bit of the control word. If an error is triggered (such as a communication error), the output remains unchanged. <b>NOTE:</b> CD00...CD10 are only accessible with [Control Mode] CHCF set to [I/O profile] IO.
[C100]...[C115]	C100...C115	Bit x Modbus ctrl word (e.g. Virtual digital input CMD1.00...CMD1.15 with integrated Modbus Serial). The state of the output is modified accordingly with the bit of the Modbus control word. If an error is triggered (such as a communication error), the output remains unchanged. <b>NOTE:</b> C100...C110 are only accessible with [Control Mode] CHCF set to [I/O profile] IO.
[C200]...[C215]	C200...C215	Bit x CANopen ctrl word (e.g. Virtual digital input CMD2.00...CMD2.15 with CANopen® fieldbus module). The state of the output is modified accordingly with the bit of the CANopen control word. If an error is triggered (such as a communication error), the output remains unchanged. <b>NOTE:</b> C200...C210 are only accessible with [Control Mode] CHCF set to [I/O profile] IO.
[C300]...[C315]	C300...C315	Bit x Com module ctrl word (e.g. Virtual digital input CMD3.00...CMD3.15 with fieldbus module). The state of the output is modified accordingly with the bit of the fieldbus module control word. If an error is triggered (such as a communication error), the output remains unchanged. <b>NOTE:</b> C300...C310 are only accessible with [Control Mode] CHCF set to [I/O profile] IO.
[C500]...[C515]	C500...C515	Bit x Ethernet ctrl word (e.g. Virtual digital input CMD3.00...CMD3.15 with Ethernet embedded). The state of the output is modified accordingly with the bit of the Ethernet embedded control word. If an error is triggered (such as a communication error), the output remains unchanged. <b>NOTE:</b> C500...C510 are only accessible with [Control Mode] CHCF set to [I/O profile] IO.
[set 1 active]...[set 3 active]	CFP1...CFP3	Parameter set 1, 2 or 3 is active.
[Cnfg.0 act.]...[Cnfg.3 act.]	CNF0...CNF3	Configuration 0, 1, 2 or 3 is active

Setting	Code / Value	Description
[Current Thd Reached]	CTA	Motor current threshold ([High Current Thd] CTD) reached
[Low Current Reached]	CTAL	Current low threshold ([Low I Threshold] CTDL) reached
[DC charged]	DBL	DC bus charged
[DC charging]	DCO	DC charging <sup>(2)</sup> The output is automatically configured to this function by setting the parameter [DC Charging Assign] DCO.
[Dynamic Load Warning]	DLDA	Dynamic load detection.
[External Error Warning]	EFA	External error warning
[Forced Run]	ERN	Emergency Run
[Mot Freq High Thd 2]	F2A	Second frequency threshold ([Freq. threshold 2] F2D) reached
[Mot Freq Low Thd 2]	F2AL	Second frequency low threshold ([2 Freq. Threshold] F2DL) reached
[High Speed Reached]	FLA	High speed reached
[Operating State Fault]	FLT	Operating state fault
[Pulse Warn Thd Reached]	FQLA	Pulse warning threshold reached
[Fallback speed]	FRF	Reaction on event / fallback speed
[Mot Freq High Thd]	FTA	Motor frequency threshold ([Motor Freq Thd] FTD) reached
[Mot Freq Low Thd]	FTAL	Frequency low threshold ([Low Freq.Threshold] FTDL) reached
[Idle State]	IDLE	Device in energy saving state
[Idle Rdy Or Run State]	IDRR	Device in energy saving or ready or running state.
[Idle Or Rdy State]	IDRY	Device in energy saving or ready state.
[Internal Error 22]	INFM	Internal error 22 (Embedded Ethernet)
[Mains Contactor]	LLC	Mains contactor <sup>(2)</sup> The output is automatically configured to this function by setting the parameter [Mains Contactor] LLC.
[Limit Switch Reached]	LSA	Limit switch function activated.
[I present]	MCP	Motor current present
[Forward]	MFRD	Run forward
[Reverse]	MRRS	Run reverse
[M/S Device Warn]	MSDA	M/S Device Warn <sup>(2)</sup>
[Output cont]	OCC	Output contactor control <sup>(2)</sup> The output is automatically configured to this function by setting the parameter [Out. Contactor Assign] OCC.
[Process Overload Warning]	OLA	Overload warning
[PID error Warning]	PEE	PID error warning
[PID Feedback Warn]	PFA	PID feedback warning
[PID High Fdbck Warn]	PFAH	PID feedback high threshold (PAH) reached
[PID Low Fdbck Warn]	PFAL	PID feedback low threshold (PAL) reached
[Regulation Warning]	PISH	PID regulation unable to reach the set point

Setting	Code / Value	Description
[Power Removal State]	PRM	Power removal state. Without power supply, the information cannot be delivered. With this setting value, the power supply must be not external.
[Ready]	RDY	Ready to start
[Pwr Backup Warn]	RFTA	Power backup mode warning
[Speed Maintained]	RLS	Reaction on event / maintain speed
[Ramp switching]	RP2	Ramp switching state
[Slack Rope Warning]	RSDA	Rope Slack
[Trq ctrl Warning]	RTA	Torque control time-out warning
[Ref Freq High Thd reached]	RTAH	Frequency reference high threshold reached
[Ref Freq Low Thd reached]	RTAL	Frequency reference low threshold reached
[Device Running]	RUN	Drive running
[Rdy Or Run State]	RYRN	Device in ready or running state.
[Ref Freq Reached]	SRA	Frequency reference reached
[Modbus Com Inter.]	SLF1	Modbus communication interruption warning
[Lim T/I Reached]	SSA	Limit torque / I reached: Torque current limitation warning
[Per Type of Stop]	STT	Reaction on event / stop on STT without an error triggered after stop.
[STO fct status]	STOS	Safe torque off function status <sup>(4)</sup>
[Dev Thermal reached]	TAD	Drive thermal threshold reached
[Device Therm Warn]	THA	Drive thermal state warning
[IGBT Thermal Warning]	TJA	Thermal junction warning
[AI1 Th Warning]...[AI5 Th Warning]	TP1A...TP5A	Thermal warning on AI <sup>(3)</sup>
[Temp Sens AI1 Warn]...[Temp Sens AI5 Warn]	TS1A...TS5A	Temperature sensor AI warning (open circuit) <sup>(3)</sup>
[Mot2 Therm Thd reached]...[Mot4 Therm Thd reached]	TS2...TS4	Motor thermal threshold TTD2, TTD3 or TTD4 is reached
[Motor Therm Thd reached]	TSA	Motor thermal threshold ([Motor Therm Thd] TTD) reached
[High Torque Warning]	TTHA	High torque threshold
[Low Torque Warning]	TTLA	Low torque threshold
[Process Undld Warn]	ULA	Underload warning
[Preventive UnderV Active]	UPA	Undervoltage prevention warning
[Undervoltage Warning]	USA	Undervoltage warning
<p>(1): On relay R1, the factory setting is [Operating State Fault] FLT. On ATV●60 and ATV●80, the factory setting of R60 is [Cabinet Fan Command] FCC. R60 can only be assigned to NO or FCC.</p> <p>(2): This setting cannot be accessed with R1.</p> <p>(3): Event on AI2 is not available on ATV900</p>		

(4): This parameter displays the state of the safety function STO.

Value	Code / Value	Description
[Active]	STO	STO active. This setting is displayed when STOA and STOB both have a low status. The relay is in state 0 (relay open).
[Not active]	IDLE	STO not active. Drive in IDLE state. This state is displayed when STOA and STOB both have a high status . The relay is in state 1 (relay closed).
[Error]	FLT	Drive is in error. This state is displayed when STOA and STOB have different status (High/Low). The relay is in state 0 (relay open).

**Note:** For ATV•30•••F, ATV•50•••F, ATV•60, ATV•80, or ATV•L0, with STOA and STOB on high status, the device is in

- STO if only the control block is supplied (with 24 V)
- IDLE when:
  - [Stop and Go] STG function is enabled, or
  - the device is fully supplied.

## [Rx Delay time] RxD

[R1 Delay time] R1D, [R2 Delay time] R2D, [R3 Delay time] R3D, [R4 Delay time] R4D, [R5 Delay time] R5D, [R6 activ delay time] R6D, [R60 Delay time] R60D, [R61 Delay time] R61D, [R62 Delay time] R62D, [R63 Delay time] R63D, [R64 Delay time] R64D, [R65 Delay time] R65D, [R66 Delay time] R66D

Rx activation delay time.

It represents the delay before modifying the state of the relay when the assigned event becomes true.

If the corresponding relay is assigned to one of the following assignments, the delay is forced to 0 ms and it cannot be modified:

- [Operating State Fault] FLT,
- [Mains Contactor] LLC,
- [DC charging] DCO,
- [Brake Sequence] BLC,
- [Output cont] OCC,

Value range	Description
0...60,000 ms (step: 1 ms)	<b>Factory setting:</b> 0 ms

## [Rx Active at] RxS

[R1 Active at] R1S, [R2 Active at] R2S, [R3 Active at] R3S, [R4 Active at] R4S, [R5 Active at] R5S, [R6 Active at] R6S, [R60 Active at] R60S, [R61 Active at] R61S, [R62 Active at] R62S, [R63 Active at] R63S, [R64 Active at] R64S, [R65 Active at] R65S, [R66 Active at] R66S

Rx status (output active level).

It defines the state 1 or 0 of the relay to the true state of the assigned event.

If the relay R1...R6 is assigned to one of the following assignments, the delay is forced to [High Level] POS:

- [Operating State Fault] FLT,
- [Mains Contactor] LLC,
- [DC charging] DCO,