SIEMENS

Data sheet

6DD1607-0AA2



SIMATIC S7-400, FM458-1 DP application group for SIMATIC S7-400

Supply voltage Reted value (DC) • \$ V DC • \$ V DC yemissible range (ripple included), lower limit (DC) permissible range (ripple included), uoyer limit (DC) 9 permissible range (ripple included), uoyer limit (DC) 15 A Current consumption, nax. 3 A Memory Backup • present Yes, SRAM Battery Backup battery • Backup burger (real-time) Yes, SRAM Difference Present Yes, SRAM Battery Backup battery • Backup burger, max. 15 µA Time of day Clock • Hardware clock (real-time) Yes • Resolution 500 ms Digital inputs Rated value (DC) • Alardware dock (real-time) • for signal "0", • for signal "1" 10 for signal "1" 110 totage • for signal "1", max. 5 µs Protocol		
• 5 V DC Yes • 24 V DC Yes permissible range (ripple included), upper limit (DC) 4.8 V fput current 5.25 V Current consumption, typ. 1.5 A Current consumption, max. 3 A Memory Backup ● present Yes, SRAM Backup battery • Backup battery • Backup battery • Backup current, max. 15 µA Time of day Clock • Presolt Ves S Connector X2 Input of day 500 ms Digital inputs 8; Connector X2 Number of digital inputs 8; Connector X2 Input offage - 13.5 to 33V Input offaginal "0", max. (permissible quiescent current) 0 mA • for signal "0", max. (permissible quiescent current) 0 mA • for signal "0", max. (permissible quiescent current) 0 mA • for signal "0", max. (permissible quiescent current) 0 mA • for signal "0", max. 5 μs Protocols Yes; With connection to interrupt tasks Policed tate acchange (slave-to-slave communication) Yes	Supply voltage	
• 24 V DC Yes permissible range (ripple included), upper limit (DC) 4.8 V permissible range (ripple included), upper limit (DC) 5.25 V Input current 1.5 A Current consumption, max. 3 A Mamory 1.5 A Current consumption, max. 3 A Backup • • present Yes, SRAM Backup battery • • Backup battery • • Backup current, max. 15 μA Time of day • Clock • • Hardware clock (real-time) Yes • Resolution 500 ms Digital inputs 8: Connector X2 Input voltage • • Fasted value (DC) 24 V • for signal *0* 1.3.5 to 33V Input current • • for signal *0*, max. (permissible quiescent current) 0 mA • for signal *1*, hzp. 3 mA; at 24 V Input delay (for rated value of input voltage) • for signal *1*, max. 5 μs Protocols Yes; With connection to interrupt tasks • Direct data exchange (slave-to-slave communication) Yes	Rated value (DC)	
permissible range (ripple included), lower limit (DC) 4.8 V permissible range (ripple included), upper limit (DC) 5.25 V Input current Current consumption, typ. Current consumption, max. 3 A Memory Backup ● present Yes; SRAM Backup batery • • Backup current, max. 15 µA Time of day Clock • Hardware clock (real-time) Yes • Resolution 500 ms Digital inputs 8; Connector X2 Input voltage 24 V • Facted value (DC) 24 V • for signal "0" -1 to +6V • for signal "1" 13 5 to 33V Input delay (for rated value of input voltage) 0 mA • for signal "1", max. 5 μs Protocols Protocols Protocols Yes; With connection to interrupt tasks • Click tate achange (slave-to-slave communication) Yes	• 5 V DC	Yes
permissible range (ripple included), upper limit (DC) 5.25 V Input current Current consumption, typ. 1.5 A Current consumption, max. 3 A Memory Backup e present Yes; SRAM Backup battery Backup battery • Backup current, max. 15 μA Time of day Clock • Hardware clock (real-time) Yes • Resolution 500 ms Objital inputs 8; Connector X2 Number of digital inputs 8; Connector X2 Input voltage - 1 to +6V • for signal "0" - 1 to +6V • for signal "0" - 1 to +6V • for signal "1" 13.5 to 33V Input delay (for rated value of input voltage) 0 mA • for signal "1", typ. 3 mA; at 24 V Input delay (for rated value of input voltage) 5 μs • for signal "1", max. 5 μs Protocols - at "0" to "1", max. 5 μs Protocols - Equidistance Yes; With connection to interrupt tasks • Direct data exchange (slave-to-slave communicatio	• 24 V DC	Yes
Input current Current consumption, typ. 1.5 A Current consumption, max. 3 A Memory Backup • present Yes; SRAM Backup battery • Backup current, max. • Backup current, max. 15 μA Time of day • Clock • Hardware clock (real-time) Yes • Resolution 500 ms Digital inputs • Resolution Number of digital inputs 8; Connector X2 Input voltage • Rated value (DC) • Facted value (DC) 24 V • for signal "0", max. (permissible quiescent current) 0 mA • for signal "0", max. (permissible quiescent current) 0 mA • for signal "0", max. (permissible quiescent current) 0 mA • for signal "0", max. (permissible quiescent current) 0 mA • for signal "0", max. (permissible quiescent current) 0 mA • for signal "0", max. (permissible quiescent current) 0 mA • for signal "0", max. (permissible quiescent current) 0 mA • for signal "0", max. (permissible quiescent current) 0 mA • for signal "0"	permissible range (ripple included), lower limit (DC)	4.8 V
Current consumption, typ. 1.5 A Current consumption, max. 3 A Memory Backup ● present Yes; SRAM Battery Backup current, max. Backup battery ● Backup current, max. ● Backup current, max. 15 µA Time of day ● Clock ● ● Hardware clock (real-time) Yes ● Resolution 500 ms Digital inputs 8: Connector X2 Input voltage ● ● Rated value (DC) 24 V ● for signal "0" -1 to +6V ● for signal "1" 13.5 to 33V Input current ● ● for signal "1", typ. 3 mA; at 24 V Input delay (for rated value of input voltage) 1 to +1°, max. ● for signal "1", typ. 3 mA; at 24 V Input delay (for rated value of input voltage) For to *1", max. ● proFIBUS DP Services ● Equidistance Yes; With connection to interrupt tasks ● Direct data exchange (slave-to-slave communication) Yes Inte	permissible range (ripple included), upper limit (DC)	5.25 V
Current consumption, max. 3 A Memory Backup Backup • present Yes; SRAM Battery Backup battery • Backup current, max. • Backup current, max. 15 μA Time of day Clock • Hardware clock (real-time) Yes • Resolution 500 ms Digital inputs 8; Connector X2 Input voltage • • Rated value (DC) 24 V • for signal "0" -1 to +6V • for signal "0" -1 to +6V • for signal "0", max. (permissible quiescent current) 0 mA • for signal "1", typ. 3 mA; at 24 V Input current • for signal "1", max. 5 μs Protocols Protocols PROFIBUS DP Services — Equidistance • Direct data exchange (slave-to-slave communication) Yes; With connection to interrupt tasks • Direct data exchange (slave-to-slave communication) Yes	Input current	
Memory Backup • present Yes; SRAM Battery Backup battery • Backup current, max. 15 μA Time of day Clock • Hardware clock (real-time) Yes • Resolution 500 ms Digital inputs 8; Connector X2 Number of digital inputs 8; Connector X2 Input voltage - • Rated value (DC) 24 V • for signal "0" -1 to +6V • for signal "0" -1 to +6V • for signal "1" 13.5 to 33V Input current 0 mA • for signal "0", max. (permissible quiescent current) 0 mA • for signal "1", typ. 3 mA; at 24 V Input delay (for rated value of input voltage) for standard inputs - at "0" to "1", max. 5 μs Protocols - PROFIBUS DP Services - Equidistance Yes; With connection to interrupt tasks - Direct data exchange (slave-to-slave communication) Yes Interrupts/diagnostics/status information Yes	Current consumption, typ.	1.5 A
Backup yes; SRAM Batery Backup battery Backup current, max. 15 μA Time of day Clock • Hardware clock (real-time) Yes • Resolution 500 ms Digital inputs 8; Connector X2 Number of digital inputs 8; Connector X2 Input voltage - • Rated value (DC) 24 V • for signal "0" -1 to +6V • for signal "1" 13.5 to 33V Input current - • for signal "0", max. (permissible quiescent current) 0 mA • for signal "1", typ. 3 mA; at 24 V Input delay (for rated value of input voltage) - for standard inputs - - at "0" to "1", max. 5 μs Protocols - Protocols Yes; With connection to interrupt tasks - Direct data exchange (slave-to-slave communication) Yes Interrupts/diagnostics/status Information -	Current consumption, max.	3 A
• present Yes; SRAM Backup battery • Backup current, max. • Backup current, max. 15 μA Time of day Clock • Hardware clock (real-time) Yes • Resolution 500 ms Digital inputs 8; Connector X2 Input voltage • • Rated value (DC) 24 V • for signal "0" -1 to +6V • for signal "0" -1 to +6V • for signal "0" -1 to +6V • for signal "1" 13.5 to 33V Input current 0 mA • for signal "1", typ. 3 mA; at 24 V Input delay (for rated value of input voltage) for signal "1", max. for signal "1", typ. 5 μs Protocols PROFIBUS DP Services - Equidistance - Direct data exchange (slave-to-slave communication) Yes; With connection to interrupt tasks Interrupts/diagnostics/status information Yes	Memory	
Battery Backup battery • Backup current, max. 15 μA Time of day Clock • Hardware clock (real-time) Yes • Resolution 500 ms Digital inputs 500 ms Number of digital inputs 8; Connector X2 Input voltage - • Rated value (DC) 24 V • for signal "0" -1 to +6V • for signal "0" -1 to +6V • for signal "1" 13.5 to 33V Input current 0 mA • for signal "1", typ. 3 mA; at 24 V Input delay (for rated value of input voltage) - at "0" to "1", max. for standard inputs at "0" to "1", max. — other "1", max. 5 μs PROFIBUS DP Services - Equidistance Yes; With connection to interrupt tasks - Direct data exchange (slave-to-slave communication) Yes Interrupts/diagnostics/status information Yes	Backup	
Backup battery • Backup current, max. 15 μA Time of day Clock • Hardware clock (real-time) Yes • Resolution 500 ms Digital inputs 8; Connector X2 Number of digital inputs 8; Connector X2 Input voltage - • Rated value (DC) 24 V • for signal "0" -1 to +6V • for signal "1" 13.5 to 33V Input current 0 mA • for signal "0", max. (permissible quiescent current) 0 mA • for signal "1", typ. 3 mA; at 24 V Input delay (for rated value of input voltage) for standard inputs - at "0" to "1", max. 5 μs Protocols PROFIBUS DP Services - - Equidistance Yes; With connection to interrupt tasks - Direct data exchange (slave-to-slave communication) Yes	• present	Yes; SRAM
• Backup current, max. 15 μA Time of day Clock • Hardware clock (real-time) Yes • Resolution 500 ms Digital inputs 8; Connector X2 Number of digital inputs 8; Connector X2 Input voltage - • Rated value (DC) 24 V • for signal "0" -1 to +6V • for signal "1" 13.5 to 33V Input current 0 mA • for signal "1", typ. 3 mA; at 24 V Input delay (for rated value of input voltage) for standard inputs - at "0" to "1", max. 5 μs Protocols Yes; With connection to interrupt tasks - Equidistance Yes; With connection to interrupt tasks - Direct data exchange (slave-to-slave communication) Yes	Battery	
Time of day Clock • Hardware clock (real-time) Yes • Resolution 500 ms Digital inputs 500 ms Number of digital inputs 8; Connector X2 Input voltage • • Rated value (DC) 24 V • for signal "0" -1 to +6V • for signal "1" 13.5 to 33V Input current 0 mA • for signal "0", max. (permissible quiescent current) 0 mA • for signal "1", typ. 3 mA; at 24 V Input delay (for rated value of input voltage) for standard inputs - at "0" to "1", max. 5 µs Protocols PROFIBUS DP Services - - Equidistance Yes; With connection to interrupt tasks - Direct data exchange (slave-to-slave communication) Yes	Backup battery	
Clock • Hardware clock (real-time) Yes • Resolution 500 ms Digital inputs 500 ms Number of digital inputs 8; Connector X2 Input voltage • Rated value (DC) 24 V • for signal "0" -1 to +6V • for signal "1" 13.5 to 33V Input current 0 mA • for signal "0", max. (permissible quiescent current) 0 mA • for signal "1", typ. 3 mA; at 24 V Input delay (for rated value of input voltage) for standard inputs - at "0" to "1", max. 5 μs Protocols PROFIBUS DP Services - - Equidistance Yes; With connection to interrupt tasks - Direct data exchange (slave-to-slave communication) Yes	Backup current, max.	15 μΑ
• Hardware clock (real-time) Yes • Resolution 500 ms Digital inputs 8; Connector X2 Input voltage 8; Connector X2 • Rated value (DC) 24 V • for signal "0" -1 to +6V • for signal "1" 13.5 to 33V Input current 0 mA • for signal "0", max. (permissible quiescent current) 0 mA • for signal "1", typ. 3 mA; at 24 V Input delay (for rated value of input voltage) for standard inputs - at "0" to "1", max. 5 μs Protocols PROFIBUS DP Services - - Equidistance Yes; With connection to interrupt tasks - Direct data exchange (slave-to-slave communication) Yes	Time of day	
• Resolution 500 ms Digital inputs 8; Connector X2 Input voltage • Rated value (DC) • Rated value (DC) 24 V • for signal "0" -1 to +6V • for signal "1" 13.5 to 33V Input current 0 mA • for signal "0", max. (permissible quiescent current) 0 mA • for signal "1", typ. 3 mA; at 24 V Input delay (for rated value of input voltage) for standard inputs - at "0" to "1", max. 5 μs Protocols PROFIBUS DP Services - - Equidistance Yes; With connection to interrupt tasks - Direct data exchange (slave-to-slave communication) Yes	Clock	
Digital inputs 8; Connector X2 Input voltage • Rated value (DC) 24 V • for signal "0" -1 to +6V • for signal "1" 13.5 to 33V Input current • for signal "0", max. (permissible quiescent current) 0 mA • for signal "1", typ. 3 mA; at 24 V Input delay (for rated value of input voltage) for standard inputs at "0" to "1", max. 5 µs Protocols PROFIBUS DP Services - - Equidistance Yes; With connection to interrupt tasks - Direct data exchange (slave-to-slave communication) Yes	 Hardware clock (real-time) 	Yes
Number of digital inputs 8; Connector X2 Input voltage • Rated value (DC) • for signal "0" -1 to +6V • for signal "1" 13.5 to 33V Input current • for signal "0", max. (permissible quiescent current) 0 mA • for signal "1", typ. 3 mA; at 24 V Input delay (for rated value of input voltage) for standard inputs - at "0" to "1", max. 5 μs Protocols PROFIBUS DP Services - Equidistance - Direct data exchange (slave-to-slave communication) Yes; With connection to interrupt tasks Yes Yes	Resolution	500 ms
Input voltage Rated value (DC) 24 V • for signal "0" -1 to +6V • for signal "1" 13.5 to 33V Input current 0 mA • for signal "1", typ. 3 mA; at 24 V Input delay (for rated value of input voltage) 6 or standard inputs - at "0" to "1", max. 5 μs Protocols Proof PROFIBUS DP Services - Equidistance Yes; With connection to interrupt tasks - Direct data exchange (slave-to-slave communication) Yes	Digital inputs	
• Rated value (DC) 24 V • for signal "0" -1 to +6V • for signal "1" 13.5 to 33V Input current 0 mA • for signal "1", typ. 3 mA; at 24 V Input delay (for rated value of input voltage) 5 μs for standard inputs - at "0" to "1", max. - at "0" to "1", max. 5 μs Protocols PROFIBUS DP Services - - Equidistance Yes; With connection to interrupt tasks - Direct data exchange (slave-to-slave communication) Yes	Number of digital inputs	8; Connector X2
• for signal "0" -1 to +6V • for signal "1" 13.5 to 33V Input current 0 mA • for signal "0", max. (permissible quiescent current) 0 mA • for signal "1", typ. 3 mA; at 24 V Input delay (for rated value of input voltage) 6 for standard inputs at "0" to "1", max. 5 μs Protocols Yes; With connection to interrupt tasks Equidistance Yes; With connection to interrupt tasks Direct data exchange (slave-to-slave communication) Yes Interrupts/diagnostics/status information	Input voltage	
• for signal "1" 13.5 to 33V Input current 0 mA • for signal "0", max. (permissible quiescent current) 0 mA • for signal "1", typ. 3 mA; at 24 V Input delay (for rated value of input voltage) for standard inputs at "0" to "1", max. 5 μs Protocols Yes; With connection to interrupt tasks Equidistance Yes; With connection to interrupt tasks Direct data exchange (slave-to-slave communication) Yes	Rated value (DC)	24 V
Input current 0 mA • for signal "0", max. (permissible quiescent current) 0 mA • for signal "1", typ. 3 mA; at 24 V Input delay (for rated value of input voltage) 6 for standard inputs -	● for signal "0"	-1 to +6V
• for signal "0", max. (permissible quiescent current) 0 mA • for signal "1", typ. 3 mA; at 24 V Input delay (for rated value of input voltage) 6 for standard inputs for standard inputs - at "0" to "1", max. - at "0" to "1", max. 5 μs Protocols - PROFIBUS DP - Services - - Equidistance Yes; With connection to interrupt tasks - Direct data exchange (slave-to-slave communication) Yes Interrupts/diagnostics/status information -	● for signal "1"	13.5 to 33V
• for signal "1", typ. 3 mA; at 24 V Input delay (for rated value of input voltage) for standard inputs for standard inputs 5 μs — at "0" to "1", max. 5 μs Protocols PROFIBUS DP Services — — Equidistance Yes; With connection to interrupt tasks — Direct data exchange (slave-to-slave communication) Yes Interrupts/diagnostics/status information Interrupts/diagnostics/status information	Input current	
Input delay (for rated value of input voltage) for standard inputs	 for signal "0", max. (permissible quiescent current) 	0 mA
for standard inputs — at "0" to "1", max. 5 μs Protocols PROFIBUS DP Services — Equidistance Yes; With connection to interrupt tasks — Direct data exchange (slave-to-slave communication) Yes Interrupts/diagnostics/status information	 for signal "1", typ. 	3 mA; at 24 V
at "0" to "1", max. 5 μs Protocols PROFIBUS DP Services Equidistance Direct data exchange (slave-to-slave communication) Interrupts/diagnostics/status information Yes	Input delay (for rated value of input voltage)	
Protocols PROFIBUS DP Services — Equidistance Yes; With connection to interrupt tasks — Direct data exchange (slave-to-slave communication) Yes Interrupts/diagnostics/status information	for standard inputs	
PROFIBUS DP Services — Equidistance Yes; With connection to interrupt tasks — Direct data exchange (slave-to-slave communication) Yes Interrupts/diagnostics/status information	— at "0" to "1", max.	5 µs
Services Yes; With connection to interrupt tasks — Equidistance Yes; With connection to interrupt tasks — Direct data exchange (slave-to-slave communication) Yes Interrupts/diagnostics/status information Yes	Protocols	
— Equidistance Yes; With connection to interrupt tasks — Direct data exchange (slave-to-slave communication) Yes Interrupts/diagnostics/status information	PROFIBUS DP	
— Direct data exchange (slave-to-slave Yes Communication) Interrupts/diagnostics/status information	Services	
communication) Interrupts/diagnostics/status information	— Equidistance	Yes; With connection to interrupt tasks
		Yes
Alarms Yes	Interrupts/diagnostics/status information	
	Alarms	Yes

Potential separation	
Potential separation digital inputs	
 Potential separation digital inputs 	No; only via optional interface modules
Weights	
Weight, approx.	1 000 g
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