

Electrical Input Data

General conditions:

- $T_A = 25\text{ °C}$, unless T_C is specified.

Table 2a: Input data of RCM150 models

Model			24RCM150			110RCM150			Unit
Characteristics		Conditions	min	typ	max	min	typ	max	
$V_{i\text{cont}}$	Operating input voltage continuous	$I_o = 0 - I_{o\text{max}}$ $T_{C\text{min}} - T_{C\text{max}}$	16.8	(24)	45.0	50.4	(110)	137.5	V
V_{i2s}	for ≤ 2 s	without shutdown	14.4		50.4	43.2		154	
$V_{i\text{nom}}$	Nominal input voltage		24, (36)			(72), (96), 110			
$V_{i\text{abs}}$	Input voltage limits	3 s without damage	0		55	0		165	
I_i	Typical input current	$V_{i\text{nom}}, I_{o\text{nom}}$	6.8			1.5			A
P_{i0}	No-load input power	$V_{i\text{min}} - V_{i\text{max}}, I_o = 0$	2.5		4	4 ²		6	W
$P_{i\text{SD}}$	Idle input power	$V_{i\text{min}} - V_{i\text{max}}, V_{\text{SD}} = 0\text{ V}$	0.7		1.5	0.7 ²		1.5	W
C_i	Input capacitance ¹		40			10			μF
R_i	Input resistance					100			m Ω
$I_{\text{inr p}}$	Peak inrush current	$V_i = V_{i\text{max}}, P_{o\text{nom}}$				75			A
$t_{\text{inr d}}$	Duration of inrush current					0.5			0.5
t_{on}	Start-up time after removal of shutdown	$V_{i\text{min}}, P_{o\text{nom}}$				1000			ms
		$0 \rightarrow V_{i\text{min}}, P_{o\text{nom}}$				300			
		$V_{\text{SD}} = 0 \rightarrow 5\text{ V}$				300			

Table 2b: Input data of RCM300 models

Model			24RCM300			110RCM300			Unit
Characteristics		Conditions	min	typ	max	min	typ	max	
$V_{i\text{cont}}$	Operating input voltage continuous	$I_o = 0 - I_{o\text{max}}$ $T_{C\text{min}} - T_{C\text{max}}$	16.8	(24)	45.0	50.4	(110)	137.5	V
V_{i2s}	for ≤ 2 s	without shutdown	14.4		50.4	43.2		154	
$V_{i\text{nom}}$	Nominal input voltage		24, (36)			(72), (96), 110			
$V_{i\text{abs}}$	Input voltage limits	3 s without damage	0		55	0		165	
I_i	Typical input current	$V_{i\text{nom}}, I_{o\text{nom}}$	13.9			3			A
P_{i0}	No-load input power	$V_{i\text{min}} - V_{i\text{max}}, I_o = 0$	4		6	4		6	W
$P_{i\text{SD}}$	Idle input power	$V_{i\text{min}} - V_{i\text{max}}, V_{\text{SD}} = 0\text{ V}$	1.5			1.5			W
C_i	Input capacitance ¹		6			12			μF
R_i	Input resistance					140			m Ω
$I_{\text{inr p}}$	Peak inrush current	$V_i = V_{i\text{max}}, P_{o\text{nom}}$				120			A
$t_{\text{inr d}}$	Duration of inrush current					0.5			0.5
t_{on}	Start-up time after removal of shutdown	$V_{i\text{min}}, P_{o\text{nom}}$				1000			ms
		$0 \rightarrow V_{i\text{min}}, P_{o\text{nom}}$				300			
		$V_{\text{SD}} = 0 \rightarrow 5\text{ V}$				300			

¹ Not smoothed by the inrush current limiter at start-up (for inrush current calculation)

² Typ. value at $V_{i\text{max}}$. At lower V_i , the idle and low-load input power are smaller.