

AIRCRAFT OPERATION TABLE (Battle of Stalingrad)

	(Unit)	Lagg-3	Yak-1	IL-2	Pe-2	La-5	Bf 109 F-4	Bf 109 G-2	Ju 87 D-3	He 111 H-6	Fw 190 A-3
TEMPERATURES(max)											
Water or cylinder	deg C	100°	100°	120°	100°	215°	115°	115°	110°	110°	220°
Oil (INTAKE)	deg C	-	-	85°	-	-	85°	85°	-	-	85°
Oil (OUTPUT)	deg C	115°	115°	120°	115°	125°	-	-	105°	105°	120°
ENGINE SETTINGS											
	model	M-105PF (s)	M-105PF (s)	AM-38 (s)	M-105RF (s)	M-82 (p)	DB-601E (p)	DB-605A (p)	Jumo-211J (p)	Jumo-211J (n)	BMW-801D (p)
Normal Operation	RU: Hg										
	RPM	1050mm	1050mm	1180mm	1050mm	950mm	1.15	1.15	1.15	1.15	1.2
	GER: ATA	2700	2700	2050	2700	2400	2300	2300	2250	2250	2300
Combat / Climb	RU: Hg										
	RPM	~	~	~	~	~	1.3	1.30	1.25	1.25	1.32
	GER: ATA						2500	2600	2400	2400	2400
Emergency Power/ Boost	RPM						30 min	30 min	30 min	30 min	30 min
	GER: ATA										
	RPM			1280mm		1140mm	1.42	-	1.42	1.42	1.42
Supercharger Stage 1	meters	inf. 2500m	inf. 2300m	-	inf. 2300m	inf. 3500m	-	-	-	-	-
Supercharger Stage 2	meters	sup. 2500m	sup. 2300m	-	sup. 2300m	sup. 3500m	-	-	-	-	-
Notes	-	-	-	-	-	-	-	-	-	-	-
AIRSPEEDS											
Takeoff – Rotation	km/h	165...200	160...190	150...190	160...200	170...200	150...180	155...180	140...170	170...210	170...210
Landing – Final	km/h	200	200	190	230	205	195	200	190	190	210
Landing – Touchdown	km/h	150	140	140	160	155	150	150	135	140	165
Glideslope	km/h	200...210	195-205	185...195	220...240	200...210	190...200	195...205	180...195	180...200	205...215
Stall speed (in flight conf.)	km/h	163...189	158...175	138...158	175...200	165...183	154...171	158...174	137...176	150...184	183...209
Speed (sea level)	km/h	505	516	400	446	544	522	525	367	369	555
Speed (2000m)	km/h	548	550	410	476	-	570	569	389	398	570
Speed (4000m)	km/h	573	584	-	-	585	-	-	-	-	-
Speed (5000m)	km/h	-	-	-	498	-	-	-	-	405	-
Speed (6000m)	km/h	-	-	-	-	600	635	-	422	-	-
Speed (7000m)	km/h	-	-	-	-	-	-	648	-	-	670
Max dive speed	km/h	750	720	570	790	720	850	850	650	560	850
FRAME/DESIGN/RATES											
Stall AOA (in flight conf.)	deg	18°	18°	19.4°	13.9°	22.7°	19.9°	19.8°	19.9°	20°	15.5°
Max turn (sea level)	sec (at) km/h	22.2s at 280km/h	21.2s at 270km/h	25.7s at 250 km/h	29.9s at 270km/h	23.4s at 270km/h	20.3s at 270km/h	22.2s at 270km/h	22.2 at 230km/h	30.8s at 250km/h	24.7s at 280km/h
Max climb rate	m/s	14.9 m/s	17 m/s	7.1 m/s	10.4 m/s	18 m/s	19.5 m/s	22.3 m/s	8 m/s	4.5 m/s	16.4 m/s
Service ceiling	km	10.5 km	10.2 km	6 km	8 km	9.5 km	11.6 km	12.1 km	7 km	6.3 km	10.8 km
Max load factor	G	11 G	10.3 G	10.5 G	11 G	10 G	11 G	10.5 G	9 G	4.5 G	11 G
WEAPONS											
Guns	number x cal.	12.7 MG UB	2x7.62 ShKAS	2x7.62 ShKAS <i>Defensive:</i> Ba: 7.62 ShKAS	12.7mm MG UB 7.62mm ShKAS <i>Defensive:</i> T: 12.7 MG UB Be: 12.7 MG UB S: 7.62 ShKAS	-	2x7.92 MG17	2x7.92 MG17	2x7.92 MG17 12x7.92 MG81 <i>Defensive:</i> Ba: 2x7.92 MG81	<i>Defensive:</i> No-Tu-Be1- Be2-Le-Ri: 6x7.92 MG15	2x7.92 MG17
Cannons	number x cal.	20mm SsVAK 23mm VYa-23 37mm Sh-37	20mm SsVAK	2x20 SsVAK 2x23 VYa-23 2x37 Sh-37	-	2x20 SsVAK	20mm MG 151/20 2x15 MG151/15 2x20 MG 151/20	20mm MG 151/20 2x20 MG 151/20	2x37 BK37	<i>Defensive:</i> No-BeFwd: 2x20 MG FF	2x20 MG 151/20 2x20 MG FF
Bomb load / rockets	number x ord.	2xFAB-50sv 2xFAB-100M 6xROS-82	2xFAB-50sv 2xFAB-100M 6xROS-82	6xFAB-50sv 6xFAB-100M 8xROS-82 8xRBS-82 8xROFS-132	10xFAB-100M 4xFAB-250sv 2xFAB-500M	2xFAB-50sv 2xFAB-100M	4xSC50 SC250	4xSC50 SC250	4xSD70 3xSC250 SC500 SC1000 SC1800	16xSC50 4xSC250 SC500 2xSC1000 SC2500	4xSC50 SC250 SC500