

MODELS: Wright Cyclone SR and SGR-1820F-3, R and GR-1820F-3A

T.C. NUMBER: ATC 103

| Model - Cyclone Type - 9RA | SR-1820F-3 Direct drive | SR-1820F-3 Direct drive | R-1820F-3A Direct drive | SGR-1820F-3 8:5 reduction gearing | SGR-1820F-3 8:5 or 16:11 reduction gearing | GR-1820F-3A 16:11 reduction gearing |
|---|---|---|----------------------------|---|---|---|
| Rating: | | | | | | |
| Maximum continuous, hp, rpm, in.Hg., at: | | | | | | |
| Rated pressure altitude (ft.) | 710-1950- 34 1/2-5500 | 710-1950- 34 1/2-7000 | 715-1950- 33 1/2-7800 | 710-1950- 34 1/2-5500 | 700-1950- 34 1/2-7000 | 700-1950- 33 1/2-7800 |
| S.L. pressure altitude | 650-1950- 34 1/2-S.L. | 650-1950- 34 1/2-S.L. | 650-1950- 33 1/2-S.L. | 650-1950- 34 1/2-S.L. | 645-1950- 34 1/2-S.L. | 645-1950- 33 1/2-S.L. |
| Take-off (one minute), hp, rpm, in.Hg. | 710-1950- 36 1/2 710-1850-37 710-1800- 37 1/2 | 710-1950- 36 1/2 710-1850-37 710-1800- 37 1/2 | 730-1950-36 | 710-1950- 37 1/2 | 710-1950- 37 1/2 | 710-1950-36 |
| Fuel (minimum octane aviation gasoline) | 87 | -- | -- | -- | -- | -- |
| Bore and stroke, in. | 6.125 x 6.875 | -- | -- | -- | -- | -- |
| Displacement, cu. in. | 1823 | -- | -- | -- | -- | -- |
| Compression ratio | 6.4:1 | -- | -- | -- | -- | -- |
| Weight (dry), lbs. | 965 | -- | -- | 1060 | -- | -- |
| Propeller shaft, SAE No. | 40 | -- | -- | -- | 40 (8:5), 50 (16:11) | 50 |
| Supercharging (impeller gear ratio) | 8.31:1 | -- | -- | -- | -- | -- |
| Carburetion | Stromberg NA-U8H | Stromberg NA-F7C or NA-F7E | -- | Stromberg NA-U8H | Stromberg NA-F7C or NA-F7E | -- |
| Venturi diameter, in. | 2-1/2 | -- | -- | -- | -- | -- |
| Ignition, dual | Scintilla VAG-9DF-R5 SF9I or SF9LN magnetos | -- | -- | -- | -- | -- |
| NCIES | 2, 3 | 2, 3 | 1, 2, 3 | 2, 3 | 2, 3 | 1, 2, 3 |
| Certification basis | Approved Type Certificate No. 103 | | | | | |

NOTE 1. These engines equipped with F-50 type cylinders.

NOTE 2. 80 Octane aviation gasoline may be used provided 550 hp is not exceeded.

NOTE 3. Approval expired 7/12/37. No engines of these models manufactured after this date or with serial numbers above 24695 (models SR-1820F-3 and R-1820F-3A) or 23373 (models SGR-1820F-3 and GR-1820F-3A) eligible for use in certificated aircraft.